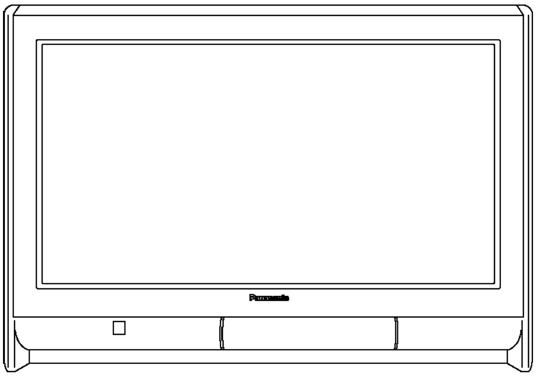
Order No. ITD0306011C1
B19 Canada : B5

Service Manual

Wide Screen TV / HDTV Monitor

CT-34WX53
DX4W Chassis



SPECIFICATIONS

Specifications

Power Source	AC120V, 60 Hz
Power Consumption:	
Average use 165 W (Maximum Current: 3.7 A)	
Stand-by condition: 0.2 W	
CRT	
34 inch, 16:9 aspect ratio	
Screen size	
29.33” (745.0mm)(W)x16.50” (419.0mm)(H)x33.65”(854.7mm)(D)	
Dimension (WxDxH)	
35.31” (897mm)x25.35” (644mm)x23.15” (588mm)	
Weight (Mass)	
175 lbs (79.5kg) Net	
ANODE Viltage	30.5 ± 0.3kV at zero beam current
Channel Capability-181	
	VHF-12: UHF-56: Cable-125
Sound	
Speaker	2 Speakers
Audio out	30W (15W+15W) (10% THD)
Headphones	M3 (3.5mm) Jack×1

FEATURES	
Two screen display function	3D Y/C FILTER
BBE VIVA	LINEAR PIP
CLOSED CAPTION	V-Chip
Accessories Supplied	Remote conrtol Transmitter EUR7603ZD0 AA Battery ×2 Size
Operating Conditions	
Temperature: 34°F - 104°F (0° - 40°C)	
Humidity: 20% -80% (non-condensing)	
Connection terminals	
AV INPUT 1-4	VIDEO 1.0 Vp-p (75 Ω) / (Phono Jack Type) / S-VIDEO Y:1.0Vp-p (75 Ω) / (Mini DIN 4-pin) C: 0.286 Vp-p (75 Ω) / AUDIO L-R 0.5Vrms / (PhonoJack Type x 2)
AV PROG OUT	VIDEO 1.0Vp-p (75 Ω) (Phono Jack Type) AUDIO L-R 0.5 Vrms (Phono Jack Type x2)
TO AUDIO AMP	AUDIO L-R 0.5 Vrms / (Phono Jack type x2)
COMPONENT VIDEO	
INPUT1-2	Y 1.0 Vp-p (including synchronization) / PB /PR ± 0.35 Vp-p / AUDIO L-R 0.5 Vrms / (Phono Jack Type x 2)
DIGITAL IN INPUT	
	DVI 1.0 24 pin AUDIO L-R 0.5 Vrms (Phono Jack Type × 2)

Design and Specifications are subject to change without notice.

Weight and Dimensions shown are approximate.

1. Safety Precautions

1.1. General Guidelines

1. **It is advisable to insert an isolation transformer in the AC power line before servicing a hot chassis.**

2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations, are properly installed.
4. Before switching the power on, measure the resistance between B + line and cold side chassis ground. Connect the "-" side of an ohmmeter to the B+ line, and the "+" side to chassis ground. Each line must have moreresistance value than the specified one as follows:

B+ line	TEST POINT	SPECIFICATION
MAIN 9V	TPA7	9.0V±0.5V
MAIN5V	TPA8	5.2V±0.3V
GC 2.5V	TPA9	2.7V±0.2V
STBY 3.3V	TPA16	3.3V±0.2V
STBY7V	TPP9	6.1±0.5V
+B2	TPD11	147.0V±3.0V
30V	TPD30	30V±2.0V
15V	TPD31	15.0V±1.5V
-15V	TPD151	-16.5V±1.5V
SOUND+	TPD160	18.0V±1.5V
210V	TPD34	212V±4.0V
MAIN12V	TPD6	12.0V±0.5V
SOUND+	TPP22	18.0V±1.5V
30V	TPP19	30V±2.0V
15V	TPP20	15.0V±1.5V
-15V	TPP21	-16.5V±1.5V
+B ①	TPP15	148V±3.0V
+B ②	TPP140	148V±3.0V
212V	TPP210	212V±4.0V

5. When the set is not used for a long period of time, unplug the AC power cord plug from the AC line outlet.
6. High voltage points, as high as 30.5 ± 0.3 kV, are present when the set is in operation. Operating the set without the rear cover involves in a dangerous electrical shock from the set power

supply. Servicing must not be attempted by anyonewho is not thoroughly familiar with the necessary precautions when working on high voltage equipment. Always discharge the anode of the picture tube to chassis ground before handling the picture tube.

7. After servicing, make the following leakage current checks to prevent the customer from dangerous electrical shock.

1.2. Leakage Current Cold Check

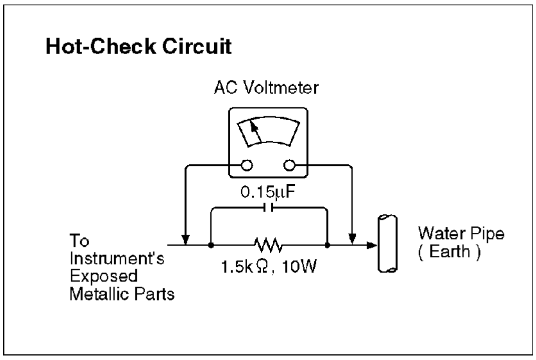
1. Unplug the AC power cord and short between the two prongs of the AC plug with a jumper wire.
2. Set the power switch of this set to ON position.
3. Measure the resistance value with an ohmmeter between the shorted AC plug and each exposed metallic part of the set cabinet such as screwheads, connectors, and control shafts. When the exposed metallic part has a return path to the chassis,the reading should be more than 1 MΩ. / When the exposed metal part does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check (See Fig.1)

1. Plug the AC power cord directly into the AC line outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10W resistor, in parallel with a 0.15 μF capacitor between each exposed metallic part of the set and an earth ground such as a water pipe.
3. Use a high impedance AC voltage meter to measure the voltage across the resistor.
4. Measure the voltage at each exposed metallic part.
5. Reverse the AC plug inserting direction at the AC line outlet and repeat each of the above measurements.
6. The voltage at any point must be less than 0.75Vrms.
7. A leakage current tester (Symptom Model 229 or the equivalent) may be used to make the hot checks. In this case, the current must be less than 500 μA.
8. If the reading is more than the above value, the set must be

repaired and rechecked before it is returned to the customer because of a possibility of an electrical shock.

Fig. 1



1.4. X-Radiation

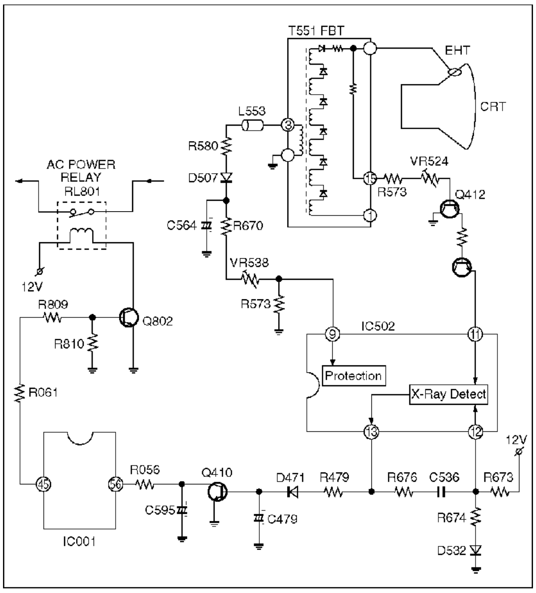
Warning:

1. **The potential sources of X-Radiation in the monitor set are the high voltage section and picture tube.**
2. **When using a picture tube test jig for service, make sure that jig is capable of handling 30.5 kV without causing X-Radiation.**
3. **For continued X-radiation protection, in case that at least one of the components listed below is replaced, follow the adjustment procedure of the high voltage circuit. Precise adjustment is necessary for Serviceman Mode to protect X-Radiation. Refer to "High Voltage and X-Radiation Protective Circuit Adjustment section".**
   T551, IC1501, IC4002, D512, D1503, R520, R521, R522, R809, R810, R1506, R4081, R4084, R1505, R1515 C481, C528, C1506, C1507, RL801

1.5. Hold Down or Safety Circuit Information

To monitor the high voltage, the positive DC voltage from the cathode D512 is applied through R1507 and other resistors to pin 3 of IC1501, which is the input terminal of the X-ray Protection Circuit. The voltage at pin 2 of IC1501 is 5.90 ± 0.03voltage. Under normal conditions this voltage is insufficient to activate the X-ray Protection Circuit.
If the voltage at pin 3 of IC1501 increases over the voltage at pin 2 of IC1501 increases and causes the X-ray Protection to activate. Then it causes the shut down works.
In the process described above, the voltage at pin 3 of IC1501 is compared with the voltage at pin 2 of IC1501.if excessive beam current is drawn, the voltage at pin 3 of IC1501 increases. When the voltage at pin 3 of IC1501 over the voltage atpin 2 of IC1501, the voltage at pin 1 of IC1501 becomes "high" and feeds into pin 45 of micro-controller IC4002 through R4084.The micro-controller then turns off Q802, causes the AC power relay RL801 to unlatch and turns off the

receiver.


T551 FBT
EHT
CRT
L553
③
R580
AC POWER
RELAY
RL801
D507
VR524
⑮
R573
Q412
①
C564
R670
12V
VR538
R809
R573
Q802
IC502
⑨
⑪
R810
Protection
X-Ray Detect
R061
⑬
⑫
12V
R056
Q410
D471
R479
R676
C536
R673
㊺
56
C595
C479
R674
IC001
D532

1.6. Service Instruction: Procedure to apply silicone to the seal control VR538 and VR524

Purpose

To prevent any adjustment on the sealed control after final adjustment is done at factory. If the sealant are removed for any reason, the control is damaged at same time.

Material

1. Silicone-Type T8C1710201H, manufactured by Shin-Etsu / Chemical Co., Ltd. (Japan)
2. Hard ABS tube-Type TMMX004

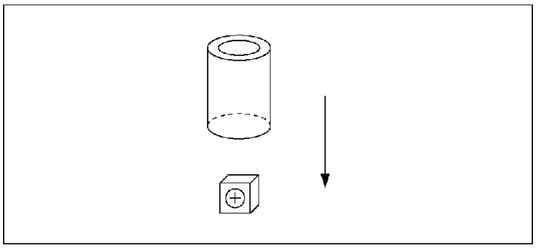
Tools

No tool is required.

Procedures

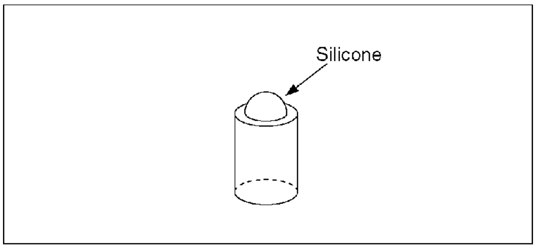
1. Place the hard ABS tube on the designated sealed control, as shown in Figure a.

Figure a.



2. When the tube is gently pressed all the way down and adhere to the P.C.B., apply the silicon into the hard ABS tube and form hemisphere like object on the top of tube, as shown in Figure b.

Figure b.

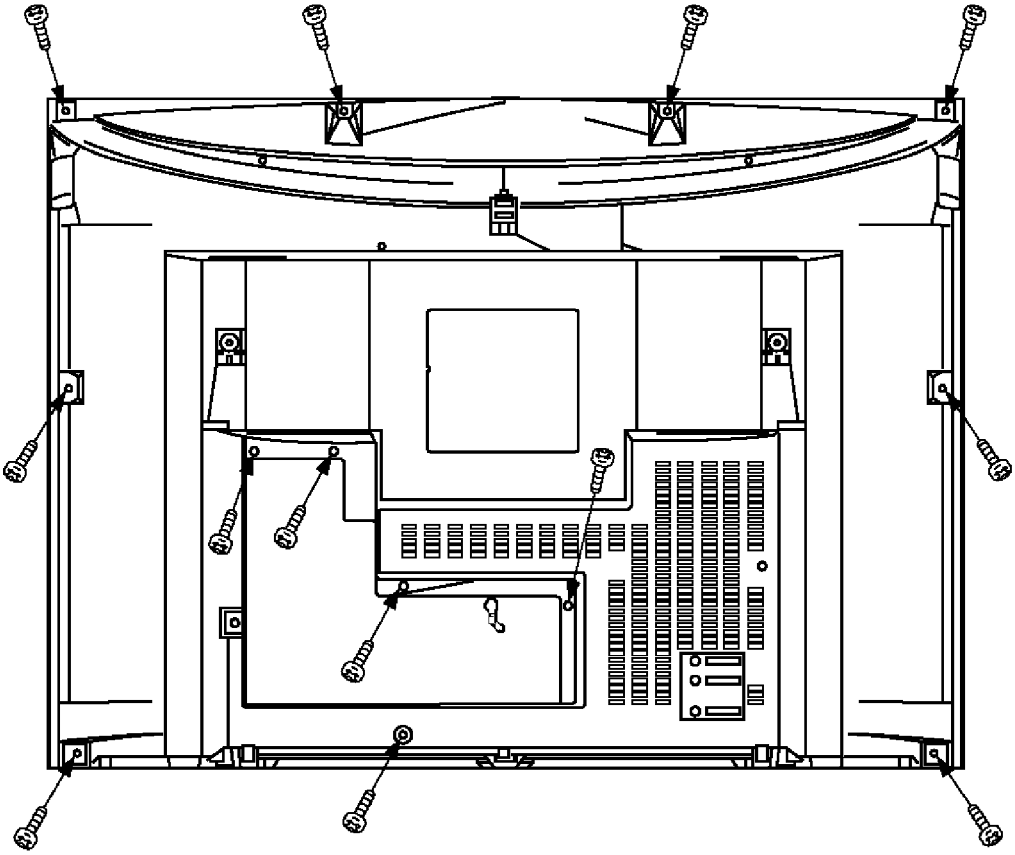


2. Service Hints

2.1. Before servicing

1. Remove the screws fixing the rear cover (14 pcs.: Refer to Fig. 1).

Fig. 1 Position of the screws fixing the rear cover

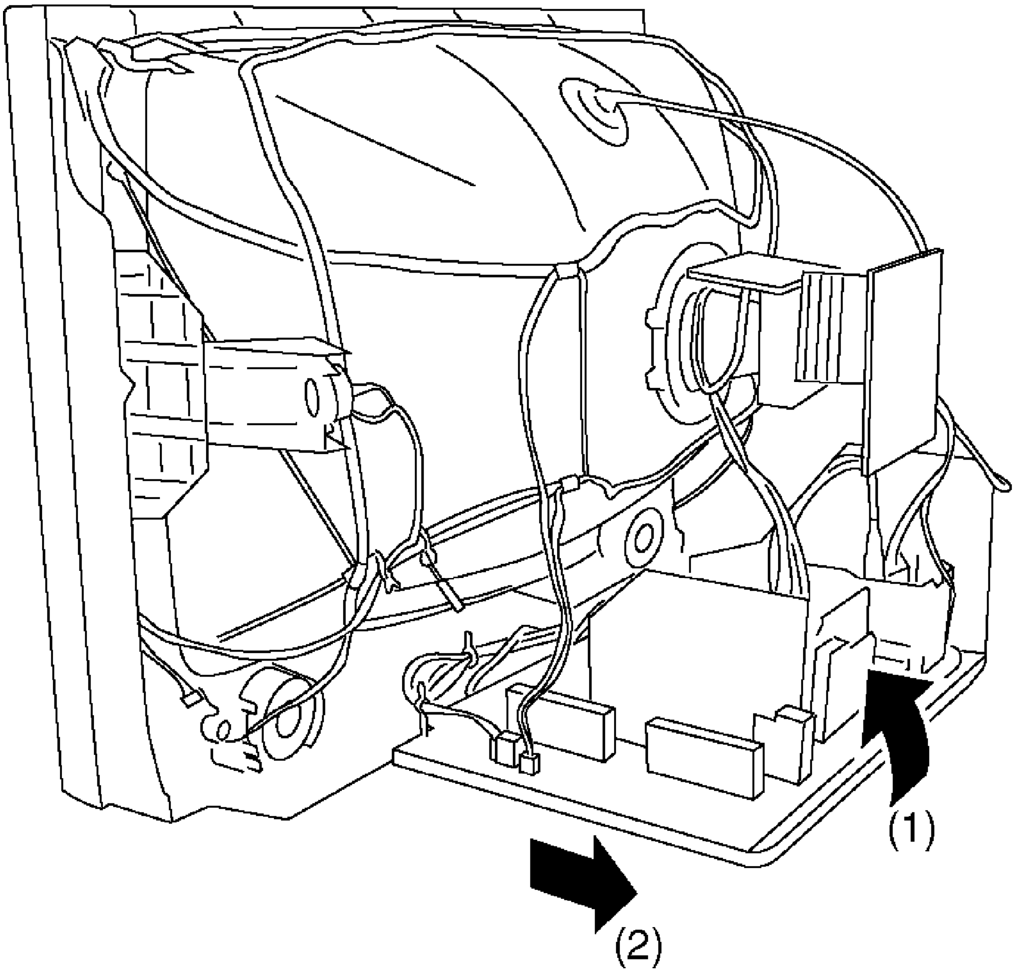


2. Remove the rear cover by raising the chassis a little and pulling to the rear . (Refer to Fig. 2.)

- At this time, disconnect the coupler P11, the ring clamper, etc. as required to facilitate the pulling out of the chassis.

- After completion of servicing, any disconnected couplers and clampers must be restored to their original condition.

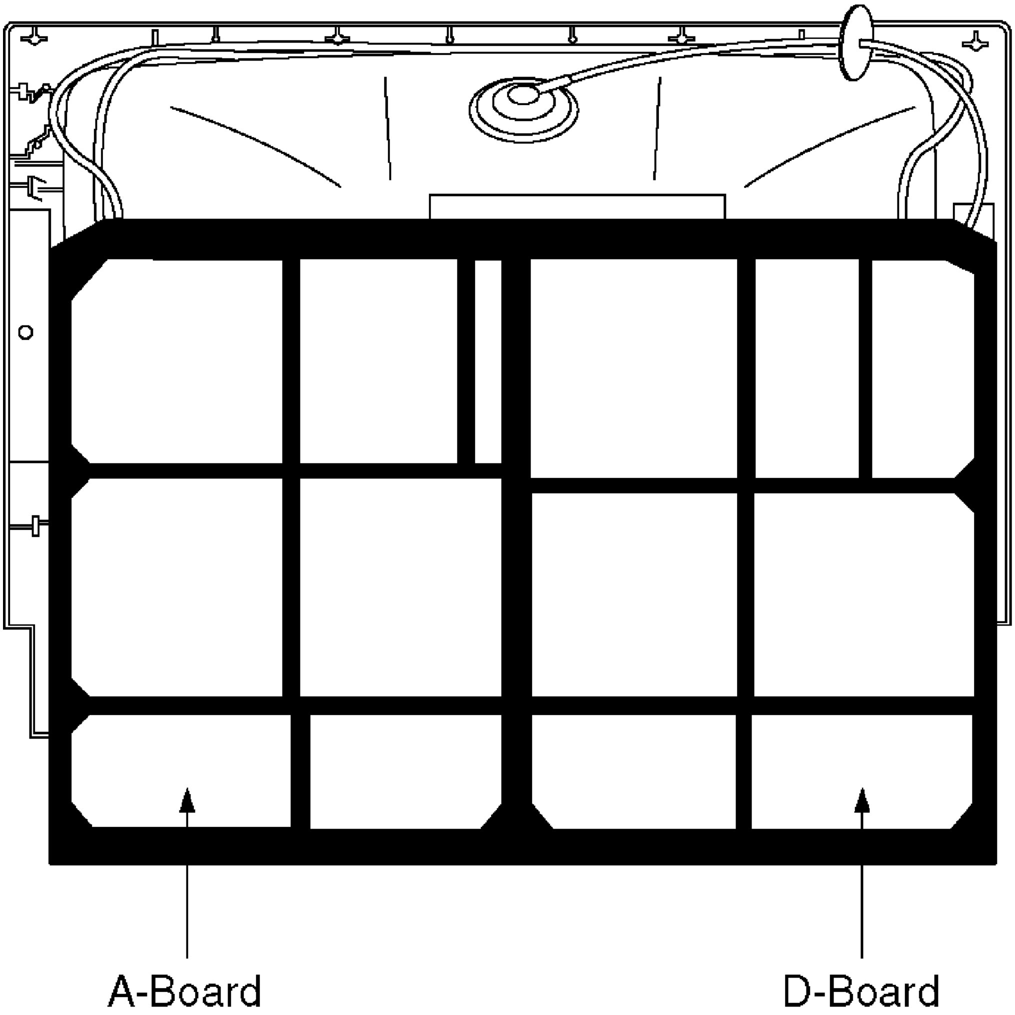
Fig. 2 How to tilt the chassis



2.2. In regard to inspection of A-Board and D-Board

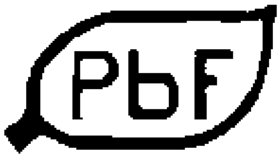
- The A-Board and D-Board can be inspected from the pattern side when the chassis is pulled out and tilted up. (Refer to Fig. 3.)
- At this time, disconnect the coupler, the clamp, etc. as required to facilitate tilting of the chassis.
- When tilting the chassis, pay sufficient attention to the L-Board at the neck of the picture tube

Fig. 3 Inspection of the A-Board and D-Board



3. About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.
In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.
The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).
That is Tin (Sn), Silver (Ag) and (Cu) although other types are available.
This model uses Pb Free solder in it's manufacture due to environmental conservation issues.
For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol



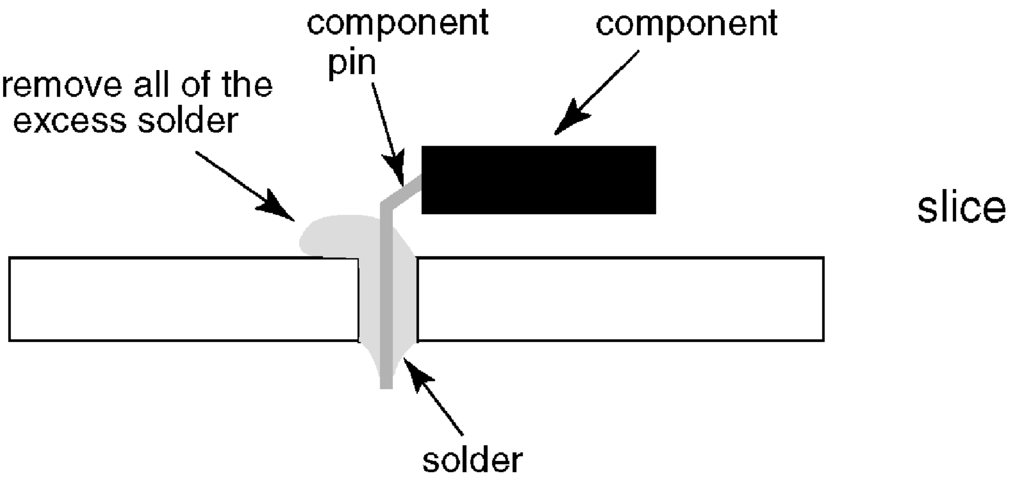
stamped on the back of PCB.

Caution

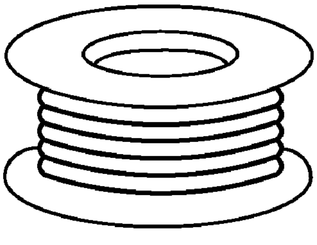
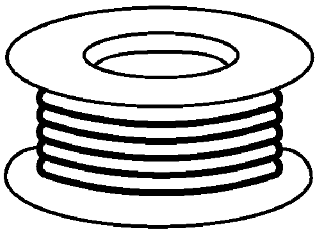
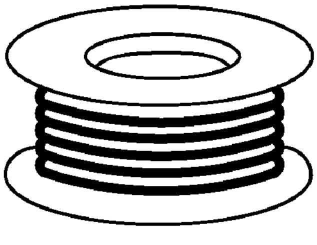
- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30 ~ 40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370

± 10 °C).

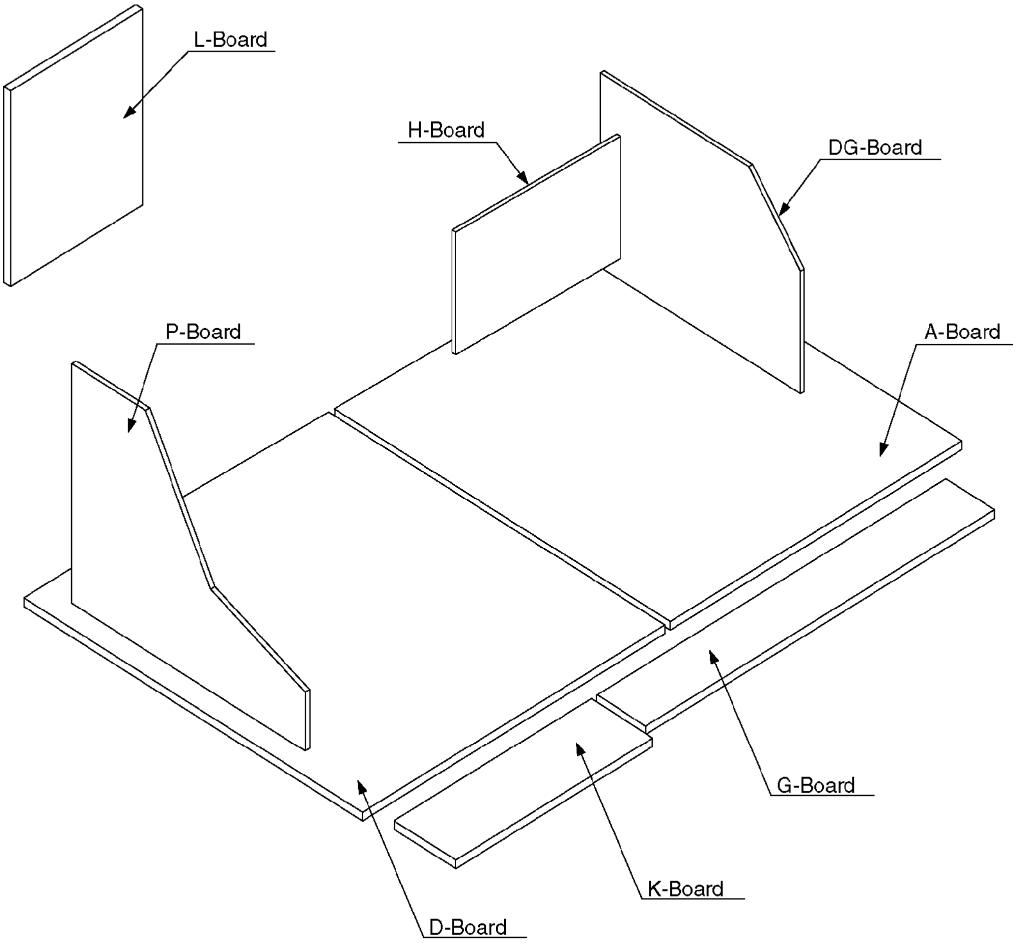
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).
  If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



Suggested Pb free solder
There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also beused.

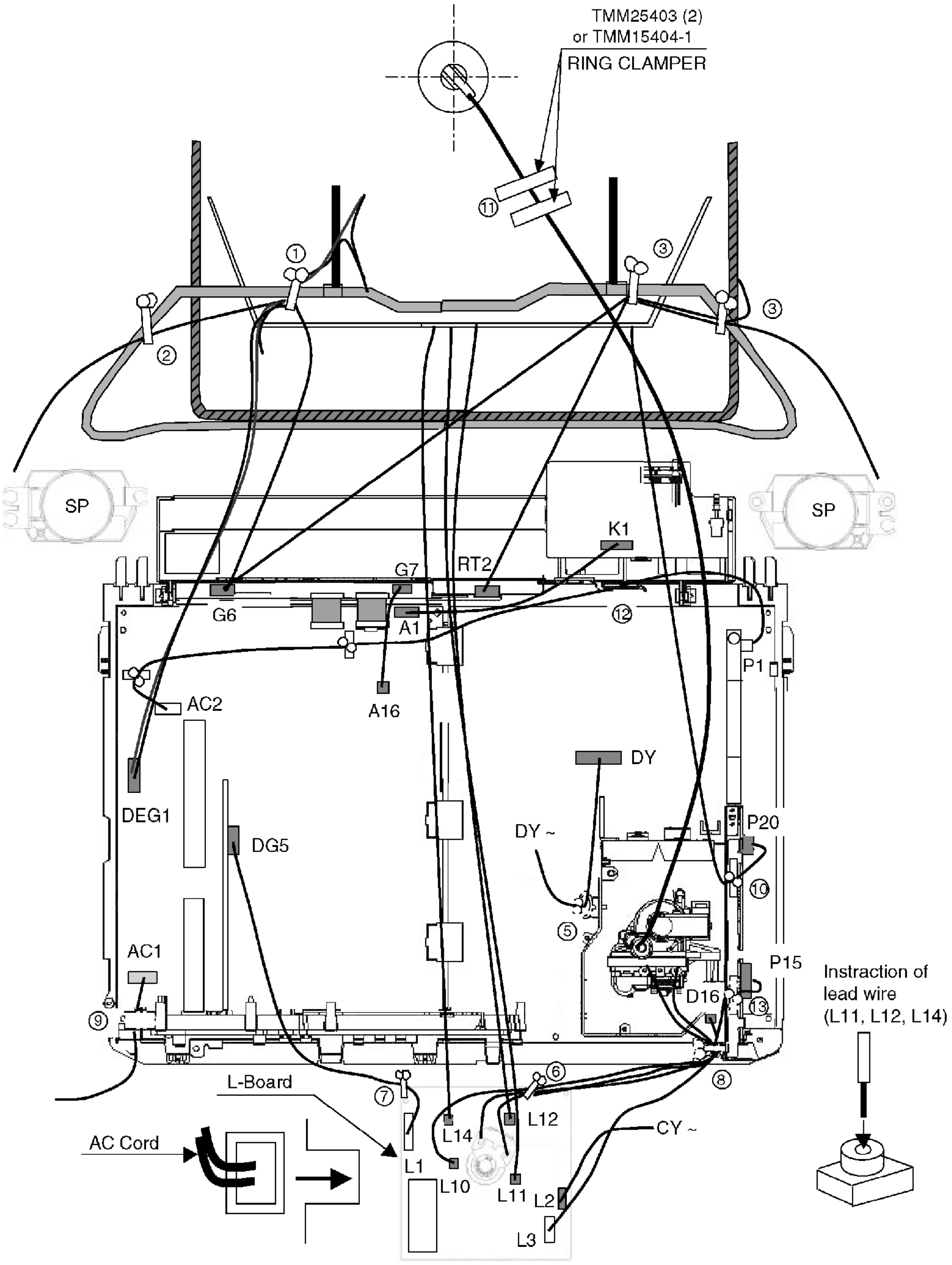
0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

4. Chassis Board Layout


L-Board
H-Board
DG-Board
P-Board
A-Board
G-Board
K-Board
D-Board

Board Name	Designation
G-Board	**Front terminal**
K-Board	**LED/Main Power SW/RM**
L-Board	**CRT Drive**
P-Board	**AC Power**
D-Board	**Power Deflection**
A-Board	**AUDIO, AV SW**
DG-Board	**Digital Core, MPU**
H-Board	**Rear terminal**

5. Location of Lead Wiring


TMM25403 (2)
or TMM15404-1
RING CLAMPER
⑪
①
③
③
②
SP
SP
K1
G7
RT2
G6
A1
⑫
P1
AC2
A16
DY
DEG1
P20
DY ~
DG5
⑩
⑤
AC1
P15
Instraction of
lead wire
(L11, L12, L14)
D16
⑬
⑨
⑥
⑧
L-Board
⑦
L12
CY ~
L14
AC Cord
L1
L10
L11
L2
L3

Connect Connector
DY, DEG1, G6, Anode, CRT GND (L11) (L12) (L14), L2, L3,
AC1, RT2, D16, P20, G6, Fo/Sc (FBT), DG5, A16, G7, A1, K1

Clamper

Clamper Lead Wiring	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭
DY					●									
ANODE LEAD											●			
G6~SP(L)			●	●										
DEG COIL~DEG1	●													
L10~D16						○		●						
G6~SP(R)	●	●												
Fo, Sc						○		●					●	
L3~P15								●						
AC									●					
DEG COIL~RT2			●	●										
DG5~L1							○							
CRT GND~P20										●				
AC2~P1												●		

<<CAUTION POINT>>

1. **The leads should not be too close to the anode leads. (Be separated at least 10mm.)**
2. **The anode leads should be separated at least 10mm from the CRT, Back Cover, DY, Circuit Board and so on.**
3. **The focus screen lead should not touch CY fixed screw.**

6. Serviceman Mode (Electronic Controls)

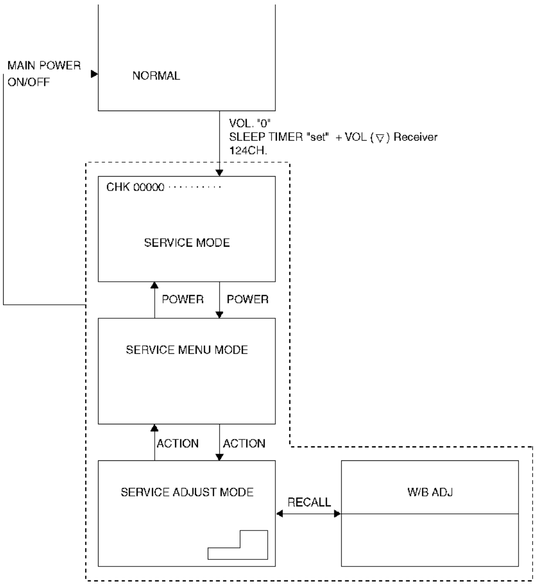
This Receiver has electronic technology using the I^{2}C BUS Concept. It performs as a control function and it replaces many mechanical controls. Instead of adjusting mechanical controls individually, many of the control function are now performedby using “On Screen Display Menu”. (The Serviceman Adjustment Mode .)

Note
It is suggested that the technician reads all the way through and understand the following the procedure for Entering/Exiting the Serviceman Mode ; then proceed with the instructions working the Receiver. When becoming familiarwith the procedure, the Flow Chart for Serviceman Mode may be used as a quick guide.

Quick Entry to Serviceman Mode:

At times when minor adjustments need to be done to the electronic controls, the method of Entering the serviceman Mode without removal of the cabinet back is as follows using the Remote Control:

1. **Select SET-UP icon and select CABLE mode.**
2. **Select TIMER icon and set SLEEP time for 30 Min.**
3. **Press ACTION button twice to exit menus.**
4. **Tune to the Channel 124.**
5. **Adjust VOLUME to minimum (0).**
6. **Press the VOL ◀ button (decrease) on Receiver . Red “CHK” appears in upper corner.**


MAIN POWER ON/OFF
NORMAL
VOL. "0"
SLEEP TIMER "set" + VOL (▽) Receiver
124CH.
CHK 00000 ··········
SERVICE MODE
POWER
POWER
SERVICE MENU MODE
ACTION
ACTION
SERVICE ADJUST MODE
RECALL
W/B ADJ

To toggle between Aging and Serviceman modes:

While the “CHK” is displayed on the left top corner of the screen, pressing the Action and the Volume up button on the Receiver simultaneously will toggle between the modes. Red “CHK” for Serviceman and yellow “CHK” forAging.

7. **Press the Power Button on the Remote Control to select one of six Serviceman Adjustment Modes.**
   A. Serviceman MTS ADJUSTMENT.
   B. Serviceman CLOCK ADJUSTMENT.
   C. Serviceman VIDEO ADJUSTMENT.
   D. Serviceman HDEF ADJUSTMENT.
   E. Serviceman VDEF ADJUSTMENT.

F. Serviceman DAF ADJUSTMENT.

G. Serviceman OTHER ADJUSTMENT.

Note: *Only the applicable settings for the Receiver serviced will be available (See a in Fig.1).*

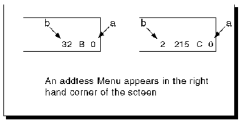

b
a
32 B 0
b
a
2 215 C 0
An address Menu appears in the right hand corner of the screen

Figure 1. **Serviceman Mode Menu Adjustments.**

Exiting the Serviceman Mode:
Press the Power buttons on the Receiver.

For Adjustments:

1. Press Channel Up/Down on the Remote Control to select one of the available Service Adjustments (a in Fig.1).

Note:
Write Down the original value set (b in Fig.1) for each address before modifying anything. It is easy to erroneously adjust the wrong item.

2. Press Volume Up/Down on the Remote Control to adjust the level of the selected Service Adjustment (b in Fig.1).

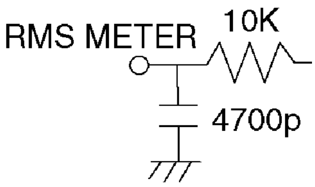
MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
			SLEEVE	SUB	
MTS	MTSIN	00	12		21
	SEPA L	00	13		06
	SEPA H	00	14		19
CLOCK	CLOCK	00	15		128
	AREA	13	D3		ALL
	IN ▶ EX	13	D4		
	EX ▶ IN	13	D5		
VIDEO	COLOR	00	16		1F
	TINT	00	17		00
	BRIGH	00	1E	0A	00
	CONT	00	22	02	00
	B-Y_G	00	18		40
	CUT_G	00	26	01	F7
	CUT_R	00	2C	01	93
	CUT_B	00	2F	01	96

MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
	BRT	00	A5	0A	05
	R DR	00	44		95
	B DR	00	45		8B
	R-Y-A	00	19		00
HDET	H LIN	00	46		80
	H POS	00	A8		4B
	H WID	00	4E		65
	PCC	00	51		55
	PCCHG	00	55		41
	PCCLG	00	59		36
	PCCHS	00	60		08
	PCCLS	00	61		03
	TOPG	00	66		A5
	BTMG	00	65		9F
	TOPSL	00	6D		04
	BTMSL	00	71		03
	TRAP	00	75		82
	PARA	00	7C		11
	SIDE	00	7D		12
V-DEF	V RAS	00	84		39
	VEAMP	00	85	01	44
	V-C	00	8D		83
	V-S	00	91		50
DAF	HDAFS	00	95		17
	VDAFG	00	96		3E
OTHER	EW_SW	00	9B		00
	VTOP	00	A3		AE
	SOSSW	01	92		01

7. Adjustment

7.1. MTS Adjustment

7.1.1. Input level Adjustment

Instrument name	Connection	Remarks
1. Filter jig 2. 2 RF signal generator 3. RMS voltage meter 4. Measurement computer	**TPA19-GND or R2208-GND** **RF ANT. INPUT** **Filter jig** **SCL2, SDA2, FA2**	

Procedure	Remarks
1. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,100% modulation ,monaural (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** **Make sure 75us PRE-EMPHASIS is off.** 2. Adjust "MTSIN" data (Input level) until the RMS voltage meter indicates 106mVrms ± 6mVrms.	

7.1.2. STERO Sep. Adjustment

Instrument name	Connection	Remarks
1. RF signal generator 2. Oscilloscope 3. Measurement computer	**RF ANT. INPUT** **TPA20-GND or R2209-GND** **SCL2, SDA2, FA2**	

Procedure	Remarks

1. Select STEREO mode in the AUDIO Menu. 2. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB ,75 Ω OPEN ,P/S 10dB) **Note:** **After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on.** 3. Adjust "SEPAL" data (Low-level separation) until the amplitude. 4. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 3kHz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** **After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on.** 5. Adjust "SEPAH" data (High-level separation) until the amplitude of the waveform on the oscilloscope is minimum. 6. Repeat steps 2. to 5. until Low-level separation and High-level separation satisfy above-mentioned conditions.	**The separation mustbe m** **20 dB at 300Hz and 3kHz**

7.2. Clock Adjustment

Instrument name	Connection	Remarks
1. Frequency counter	R003-GND (A-PWA)	

Procedure	Remarks
1. Select the "CLOCK" at SERVICE-MAN MENU. 2. Measure R003 for frequency. 3. Set "CLOCK" database on following formula. $DATA = 128 + 0.45 \times 10^{6} \times (732.4220 - F) / 732.4220$	

7.3. Sub contrast Adjustment (NTSC)

Preparation

Picture mode : VIVID (NORMAL SET)

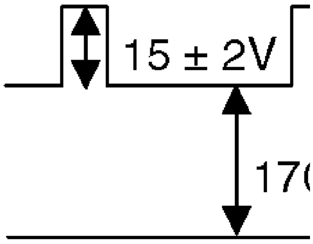
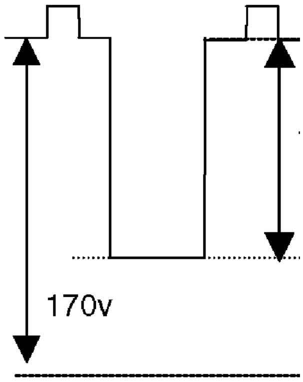
Adjustment data : BRIGH, CONT

ACL	OFF
WHITE CHARACTER CORRECTION	OFF
COLOR	OFF
VPK (V contour)	OFF
DSC	OFF
AI	OFF
DC TRANSMISSION QUANTITY CORRECTION	OFF

These data are set up when push a "R-TU

∗ Don't operation ABL circuit when adjust

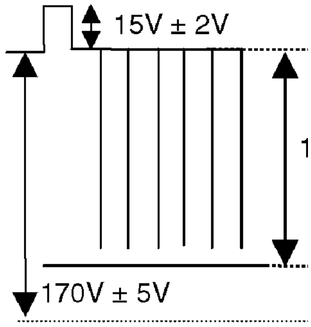
Instrument name	Connection	Remarks
1. Oscilloscope 2. Adjustment check RACK 3. Measurement computer	**KG** **CHASSIS** **SCL1, SDA1, FA2**	

Procedure	Remarks
1. Apply a studio color bar. 2. Set "BRIGH" data to "9-90"h. 3. Adjust "CUT G" data to obtain 170V between 0IRE and GND level at KG. 4. Adjust "CONT" data to obtain 110 ± 1V between 0IRE and 100IRE at KG.	**Fig. 1** < stdio color  **Fig. 2** < stdio color bar > 

7.4. Sub contrast Adjustment (HDTV)

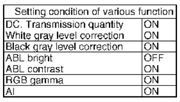
Preparation		
Picture mode : VIVID (NORMAL SET) **Adjustment data : BRIGH, CONT**		
ACL	OFF	These data are set up when push a "R
WHITE CHARACTER CORRECTION	OFF	
COLOR	OFF	
VPK (V contour)	OFF	
DSC	OFF	
AI	OFF	
DC TRANSMISSION QUANTITY CORRECTION	OFF	

Instrument name	Connection	Remarks
1. Oscilloscope **2. Adjustment check RACK** **3. Measurement computer**	**KG** **CHASSIS** **SCL1, SDA1, FA2**	

Procedure	Remarks
1. Apply a studio color bar. **2. Set "BRIGH" data to "9-90"h.** **3. Adjust "CUT G" data to obtain 170V between 0IRE and GND level at KG.** **4. Adjust "CONT" data to obtain 110 ± 1V between 0IRE and 100IRE at KG.** **5. Set “BRIGH” data to “9-B0”h.**	< HD crosshatch patt 

7.5. Color output Adjustment (NTSC)

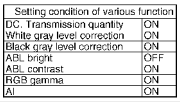
Instrument name	Setting	Remarks
1. RF signal generator	**Picture mode : NTSC** **Adjustment item : Sub Adjustment** **Picture menu : Dynamic** **Picture pattern : RAINBOW pattern** **COLORBARpattern**	

Procedure	Remarks
1. Apply a color bar pattern **2. Set up COLOR:24, TINT:00, B-Y-G:3-D, and R-Y-A:00.** **3. Confirm nothing peculiar such as don't output colors.** 	

Setting condition of various function	
DC. Transmission quantity	ON
White gray level correction	ON
Black gray level correction	ON
ABL bright	OFF
ABL contrast	ON
RGB gamma	ON
AI	ON

7.6. Color output Adjustment (HD)

Instrument name	Setting	Remarks
1. HD signal generator 2. Oscilloscope	Picture mode : NTSC 1080i Adjustment item : Sub Adjustment Picture menu : Dynamic Picture pattern : HD COLOR BAR pattern	

Procedure	Remarks
1. Apply a color bar pattern to use BSD ch or HD signal generator 2. Set up COLOR:22,TINT:00,B-Y-G:3G,and R-Y-A:00. 3. Confirm nothing peculiar such as don't output colors. 	

Setting condition of various function	
DC. Transmission quantity	ON
White gray level correction	ON
Black gray level correction	ON
ABL bright	OFF
ABL contrast	ON
RGB gamma	ON
AI	ON

7.7. Primary test

Procedure	Remarks
1. Connect AC Cord to an outlet and power switch is turned on. 2. Apply monoscope pattern and Focus the picture. 3. Perform rough purity Adjustment. 4. Perform rough convergence Adjustment. 5. Perform rough white balance Adjustment. 6. Connect an Antenna and confirm normal picture and sound.	

7.8. Encasement Aging

Setting		Remarks
1. SOUND LEVEL	MIN.	
2. COLOR CONTROL	MAX.	
3. TINT CONTROL	CENTER.	
4. BRIGHTNESS CONTROL	MAX.	
5. PICTURE CONTROL	MAX.	
6. SHARPNESS CONTROL	MAX.	
7. SPEAKER SW	ON	
8. AGING MODE	ON	

Procedure	Remarks
1. Perform Aging at 132V AC for more than 60 minutes. **Note:** **Aging has to be started after CUT-off Pre-Adjustment.**	

Instrument name	Connection	Remarks
1. DC current meter	TPD1(+) - TPD2(-)	

Procedure	Remarks
1. Apply 132V AC. 2. Push the "RECALL" key on the remote transmitter, so that Aging mode comes out. 3. Apply a monoscope pattern. And confirm meter indicates 2400 ± 100uA. 4. If the meter is not above value, adjust Sub-BRIGHT data (BRIGH) and/or screen volume.	

7.9. Deflection circuit pre Adjustment

Instrument name	Connection	Remarks
1. High voltage meter 2. Adjustment computer 3. Remote transmitter	(+) CRT ANODE LEAD (-) CRT DAG GROUND CRT GND	50kV RANGE

Procedure	Remarks
1. Set geomagnetic corr. Menu to "0"(CENTER). 2. Apply a monoscope pattern at 480i mode. 3. Adjust vertical size data to get round. 4. Obtain a crosshatch pattern. 5. Use adjustment computer to adjust Brightness and Contrast registers until picture is black. Memorize original data of Brightness and Contrast Verify high voltage reading on meter is 33 ± 1.0kV. 6. Obtain a monoscope pattern, and set above registers to original data. 7. Verify horizontal width is in normal Range. 8. Use adjustment computer to adjust E-W PCC(PCC) register. 9. Use adjustment computer to adjust H-WIDTH (H WID) register proper horizontal size. 10. Use adjustment computer to adjust H-CENTERING (H POS) register until picture is centered correctly. 11. Use adjustment computer to adjust KEYSTONE (TRAP) register properly. 12. Apply a 1080i signal. 13. Adjust vertical size data to get round. 14. Obtain a crosshatch pattern. 15. Use adjustment computer to adjust Brightness and Contrast registers until picture is black. Memorize original data of Brightness and Contrast. Verify high voltage reading on meter is 30.5 ± 1.0kV. 16. Repeat from 5 to 10 items at 1080i signal.	

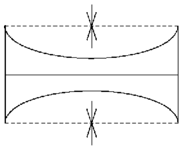
7.10. Purity Adjustment

Instrument name	Setting	Remarks
1. Non-magnetic field room 2. Degaussing coil 3. 4. Microscope 5. RF signal generator 6. HD signal generator (Equivalent of SG-T)	-Fully degauss the TV by using an external degaussing coil -Rough adjustment of H-Position, V-Position, White balance, Focus and Convergence has been completed. -Perform aging for more than 60 minutes. -Beam current is 2400 ± $^{50}_{200}$ μ A -Operate the TV for 60 minutes using the first Purity Check field to stabilize the CRT.	

Inspection method	Remarks

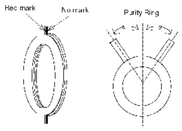
1. Fully degauss the CRT by using an external degaussing coil, and fully degauss the chassis.

2. Apply a monoscope pattern, and confirm meter indicate 2400 ± $^{50}_{200}$ μ A.
3. Adjusts the CRT landing to the optimum in the DY back and forth position adjustment and Purity magnet
4. Apply a HDBB cross hatch pattern or a cross hatch pattern.
5. Adjusts a perpendicular position adjustment magnet so that the upper and lower pin cushion warp to become equal.

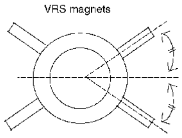


6. If purity error is found, repeat the adjustment step 3 to 5 until an optimum is obtained.
7. Tighten up DY once again 20-30 minutes later.

Note 1:
Inifialize purity ring, pairwise the red tab and the no mark tab, and turn are and together with both tabs, after confirm to anmove the pattern open the both tabs symmetrical from upside position.



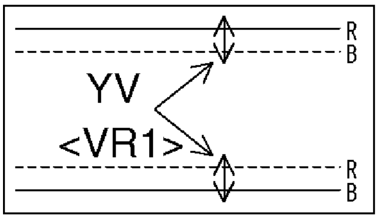
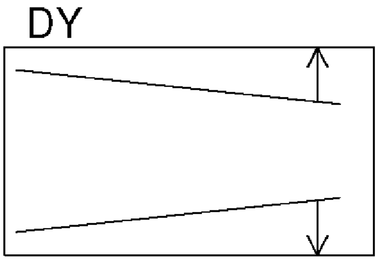
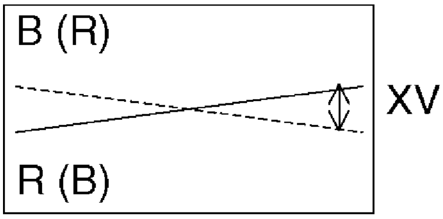
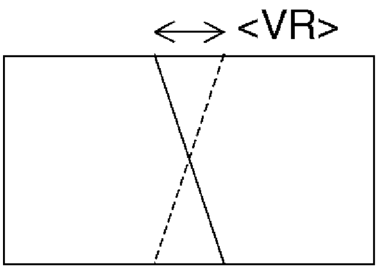
Note 2:
Inifialize penpendicular position adjustment magnet, pairwise the red tab and the no mark tab, and turn around together with both tabs, after confirm to unmove the pattern open the both tabs symmetrical from horizontal position.



7.11. Convergence adjustment and adjustment of DY (YHC/YV/XV)

<table>
<tr><th>Instrument name</th><th>Connection</th><th>Remarks</th></tr>
<tr><td>HD signal generator
(Equivalent of SG~TG91E6)
or RF signal generator</td><td></td><td></td></tr>
<tr><th colspan="2">Setting</th><th>Remarks</th></tr>
<tr><td colspan="2">-V-POSITION and V-WIDTH are almost correct.
-Set "VIDEO Adj." to "NORMAL".
-Rough adjustment of Focus has been completed.</td><td></td></tr>
<tr><th colspan="2">Procedure</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Adjust convergence by 4-pole magnet and 6-pole magnet.
2. Make left and right side of DY Non-tilt. And adjust VR1.
3. Adjust YV at VR3.

Note:
Don’t conduct second section, adjust third section at VR1, when doesn’t have YV independent correction.

4. Adjust by differential coil XY and VR2 so that total convergence may become good.
5. If center convergence is poor, Repeat from item 1.
6. Fix CY by lacquer.



 </td><td>Conduct second section
have YV independent cor</td></tr>
</table>

7.12. White quality adjustment

Setting	Remarks
1. Horizontal magnetic 0.30 Gauss 2. Vertical magnetic 0.45 Gauss 3. Geomagnetic correction DAC center 4. Perform aging for more than 60 minute **Note1:** **Beam current is 2400 ± $^{50}_{200}$uA**	

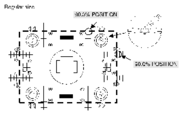
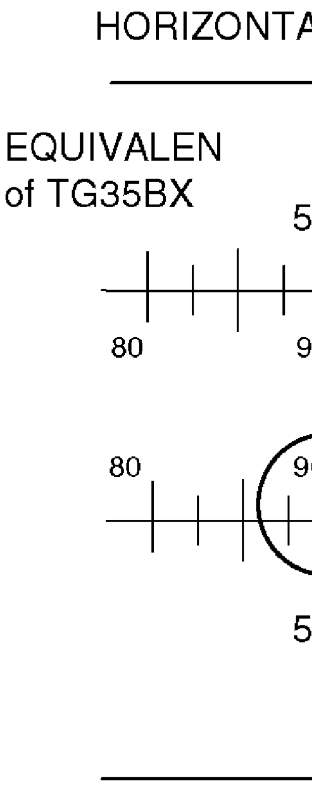
Procedure	Remarks
1. After set up East-facing tube magnetic , adjust white quality at white pattern and confirm white quality at plane color (red, blue, green). 2. Set up West facing tube magnetic, adjust as same as first section. 3. Repeat to first and second section. 4. Fully degauss, confirm white quality at white pattern and plane color (red, blue, green). **Note 2:** - How to affix magnet. - Take magnet away from DY about 4 ~ 5cm. - When correction poor, magnet appose transversal or load Longitudinal. - When load longitudinal, gum up to apply an adhesive. **Note 3:** - When apply pre-pattern before white quality adjustment, after confirm at adjustment value return before purity adjustment, adjust white quality. 5. After set up South-facing tube magnetic, confirm pattern turn left-handed rotation at Geomagnetic correction DAC increase. 6. After set up North-facing tube magnetic, confirm pattern turn right-handed rotation at Geomagnetic correction DAC increase.	

7.13. Deflection Adjustment (480i/480p)

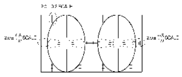
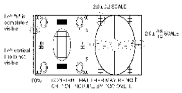
7.14. Deflection Adjustment (1080i)

Instrument name	Connection	Remarks
1. Measurement computer or remote transmitter **2. Signal generator (1080i 16:9 signal)**	**SCL1, SDA1, FA2**	

Setting	Remarks
1. BRIGHTNESS CONTROL CENTER(31DAC) **2. PICTURE CONTROL MAX.**	

Procedure	Remarks
1. Apply a 1080i monoscope pattern to component input. **Then adjust data of V-SIZE(VEAMP), V-POSITION(V RAS), H-WIDTH(H WID), H-POSITION(H POS) SO THAT V-SIZE, V-POSITION, H-WIDTH, H-POSITION satisfies regular shown in Fig.1.** **2. Apply a 1080i crosshatch pattern. Then adjust data of V-LIN (V-C), V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC), TOP SIDE CORNER PCC (TOPG), BOTTOM SIDE CORNER PCC (BTMG), PCC BALANCE (SIDE), PARALELLOGRAM (PARA) and (PCCHG/PCCLG/TOPSL/BTMSL).** **(see 7.8 Defelection Adjustment(480i/480p) item 3.)** **3. Apply a 1080i monoscope pattern and crosshatch pattern. Then confirm that it is regular size show in Fig.1.** **4. Write adjustment data to EEPROM.**  **Adjust so that H-width is 90% scan. And adjust so that 90% line match edge of screen.** **Adjust so that V-size is 90.0% scan. The area over 90.0% at screen top is poor for V-LIN and takes notice that this area is disappeared.**	 HORIZONTA EQUIVALEN of TG35BX 5 80 9 80 9 5

7.15. Deflection Adjustment (DOUBLE WINDOW)

Procedure	Remarks
1. Apply a monoscope pattern of NTSC to both parent picture and child picture. 2. Confirm that it is regular size show in Fig.1. **Fig. 1**  3. Apply a 1080i monoscope pattern to parent picture and a NTSC child pictures. 4. Confirm that it is regular size show in Fig.2. **Fig. 2**  2.0±0.2 SCALE Left "5" is completely visible Left vertical line is not visible 90%	

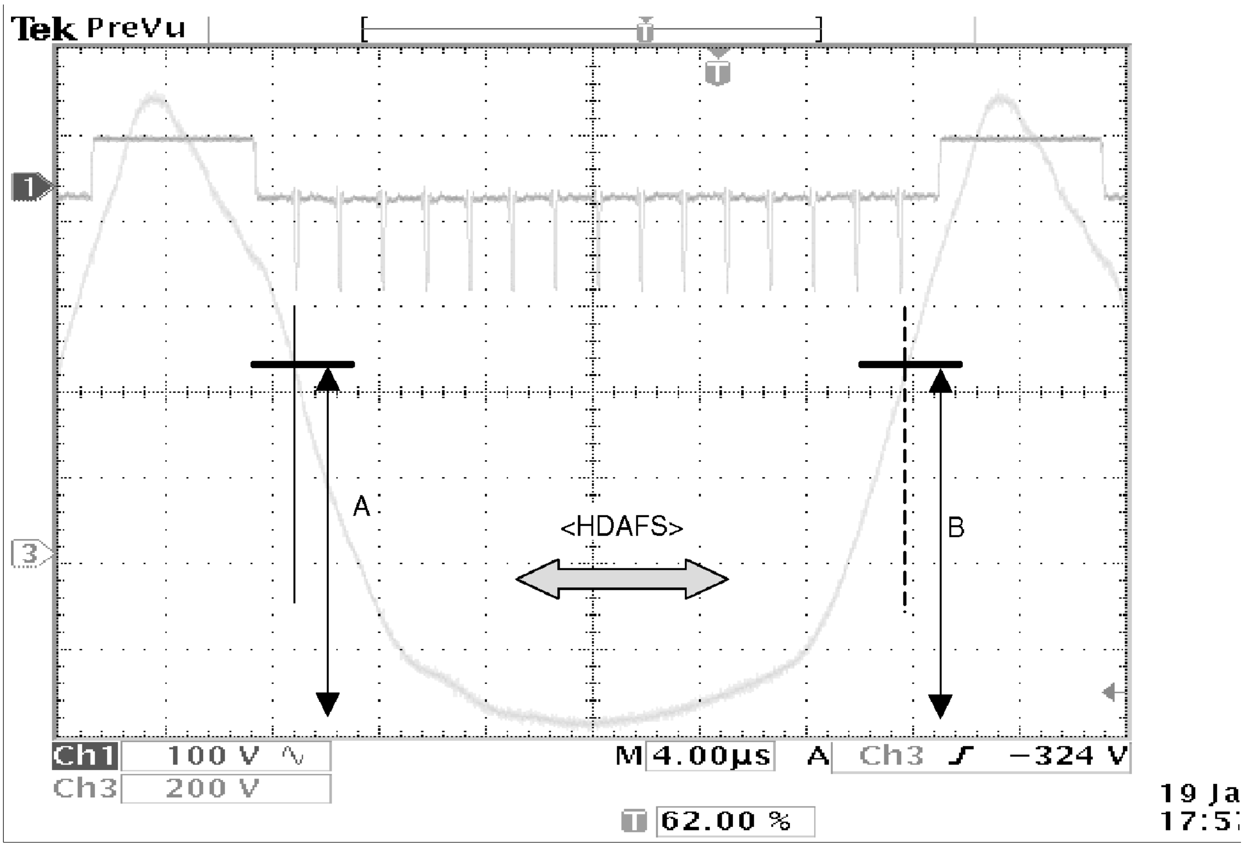
7.16. Deflection Adjustment Procedure

7.17. DAF Adjustment

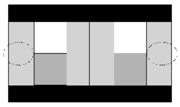
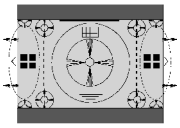
Instrument name	Connection	Remarks
1. Oscilloscope with 100x1 probe 10X1probe	DAF OUT (J172) - GND KG - GND DAF OUT (J172) - GND KG - GND	

Setting	Remarks
BRIGHTNESS CONTROL CENTER (31DAC) PICTURE CONTROL MAX.	

Procedure	Remarks
1. Apply a cross hatch pattern (NTSC). 2. Connect oscilloscope DAF out (DAF WAVE FORM) and KG (SIGNAL WAVE) . If the level of "A" and the level of "B" are different, Adjust data "H DAF phase" (HDAFS) so that became the same level. (Fig.1) 3. Apply a crosshatch pattern (DTV 1080i). 4. Same as (NTSC) If the level of "A" and the level of "B" are different, adjust data "H DAF phase" (HDAFS) so that became the same level. (Fig.1) 5. Apply a crosshatch pattern (525p). If the level of "A" and the level of "B" are different, adjust data"H DAF phase" (HDAFS) so that became the same level. (Fig.1) 6. Confirm that Focus balance of left side and light side. is same level. both NTSC signal and 1080i signal.	



7.18. DAF Adjustment (Moire check)

Procedure	Remarks
1. Apply a white balance pattern at split picture mode (NTSC). **2. Confirm no moire on the both side of display.**  **3. Apply a ITE monoscope pattern (DTV 1080i) Y=40% signal level** **4. Confirm no moire on the both side of display.** 	

7.19. Focus Adjustment

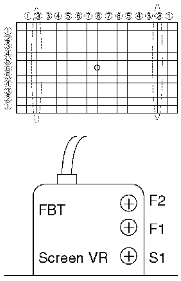
Instrument name	Connection	Remarks
1. HD signal generator **2. RF signal generator**	**Apply HDBB Crosshatch pattern** **Crosshatch pattern**	

Inspection method	Remarks

1. Apply a crosshatch pattern.
2. Adjust the FOCUS VOLUME1 so that the vertical lines two lines from the edge is minimizes.
3. Turn the FOCUS VOLUME2 fully counterclockwise, and adjust the FOCUS VOLUME2 so that the center of picture is the sharpest.

Note:
The focus is balanced for the centerline (vertical) of the crosshatch pattern and the vertical lines two lines from the edge.
Achieve a balance center point focus and out must circumferential focus.
Repeat the adjustments 2 and 3 Until an optimum is obtained.
Apply a HD crosshatch pattern and confirm the focus.
If they are poor, repeut adjustment DAF phase data.

Fig. 1



4. Apply a 1080i-crosshatch pattern and confirm the focus.

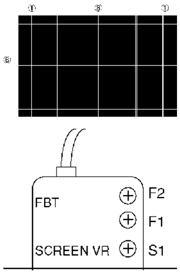
Instrument name	Connection	Remarks
1. HD signal generator		

Inspection method	Remarks

1. Apply a crosshatch pattern Fig. 1.
2. Adjust the FOCUS VOLUME1 so that the thickness of vertical lines one line from the edge minimizes, and two white lines can be seen.
3. Turn the FOCUS VOLUME2 fully counterclockwise, and adjust the FOCUS VOLUME2 so that the center of picture is the sharpest, and two white lines can be seen.

Note:
The focus is balanced for the centerline (vertical) of the crosshatch pattern and the vertical lines two lines from the edge.
Achieve a balance center point focus and out must circumferential focus.
Repeat the adjustments 2 and 4 until an optimum is obtained.
Apply a HD crosshatch pattern and confirm the focus.
If they are poor, repeat adjustment DAF phase data.

Fig. 1



4. Apply a 1080i-crosshatch pattern and confirm the focus.

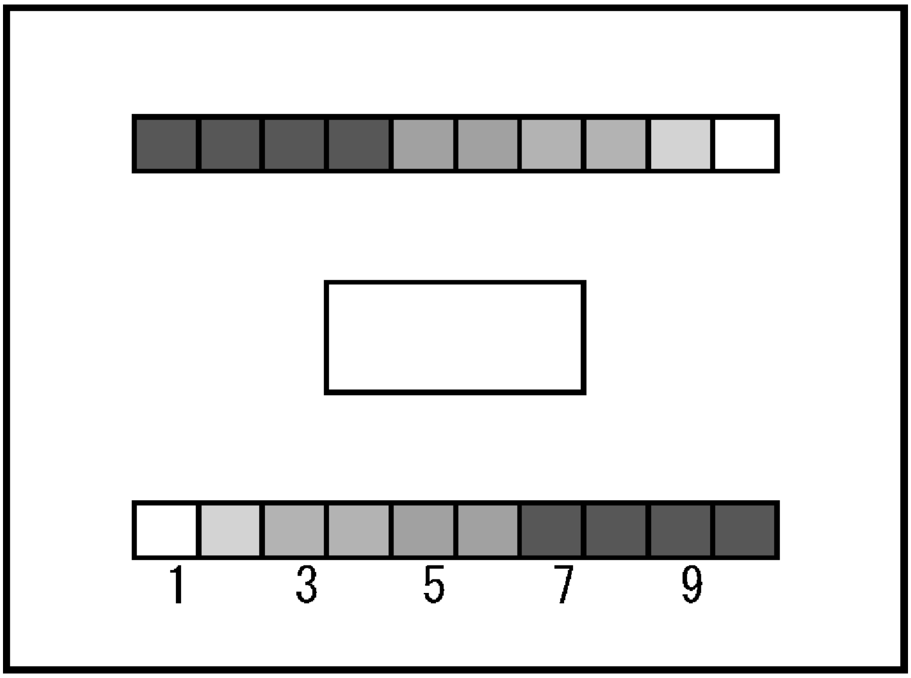
7.20. High Voltage and High Voltage protector HHS Adjustment

Instrument name	Connection	Remarks
1. RF signal generator **2. Resistance high Voltage meter** **3. DC current meter** **4. Digital Volt meter**	**D13 ① (TPD1)** **D13 ② (TPD2)** **D13 ④** **D13 ③ (GND)**	

Procedure	Remarks
1. Turn power on, apply a moonscape pattern. **2. Confirm meter indicate 2300 ± $^{50}_{200}$ uA.** **3. Adjust to turn high voltage variable resistor volume VR524 so that High Voltage meter indicate 30.5 ± 0.3kV.** **4. Adjust to turn HHS variable resister volume so that Digital Volt meter indicate 2.25 ± 0.05V.** **5. Apply a black pattern.** **6. Turn VR524, confirm to move High Voltage Protector and to work SOS under 38.5kV and High Voltage value.** **7. Turn back VR524, turn power on and apply a moonscape pattern.** **8. Adjust to turn VR524 so that High Voltage meter indicate 30.5 ± 0.3kV.** **9. After adjustment, gum up to apply an adhesive for VR524,VR528.**	

7.21. White balance Adjustment (NTSC/HD)

7.22. Sub-Bright Adjustment (NTSC)

Instrument name	Connection	Remarks
1. Measurement computer	SCL1, SDA1, FA2	
Setting		**Remarks**
1. PICTURE SETTEINGS VIVID (NORMAL) 2. NATURAL COLOR OFF 3. COLOR TEMP COOL 4. BRIGHT (NTSC) 9-90 BRIGHT (HD) 9-B0		
Procedure		**Remarks**
<Condition> **- The adjustment of Sub-Contrast, Sub-Color, and White balance complete.** **- Do this adjustment in the dark room** 1. Apply a window pattern. 2. After select "BRIGHT", press R-TUNE botten, Adjust SCREEN-VR so that the 3rd paragraph shines faintly and 4th paragraph does to the sinking style. (See Fig. 1) **Fig. 1**  		**480i BRIGHT DAC Can ad** **same as SUB-BRIGHT.** **Note:** **HD SUB-BRIGHT is adjus** **automatically.**

7.23. Heater Voltage Confirmation

Instrument name	Setting	Remarks
1. RF signal generator 2. HD signal generator 3. Resistance high Voltage meter 4. DC current meter 5. Digital Volt meter	D13 ① (+),D13 ② (-) CRT Heater terminal	

Procedure	Remarks
1. Apply a moonscape pattern. 2. Adjust SUB-CONTRAST or SUB-BRIGHT so that DC current meter 2300 $\pm^{50}_{200}$ uA. 3. Confirm that Digital Volt meter should be at 6.0V ± 0.24V. 4. Confirm that the High Volt meter should be at 30.5kV ± 0.3V. 5. Apply a BS101 HD moonscape pattern confirm that the High Volt meter should be at 30.5kV ± 0.3kV.	

8. Conductor Views

8.1. A-Board

8.2. D-Board

8.3. DG-Board

8.4. H-Board

8.5. L-Board

8.6. P-Board

8.7. G and K-Board

9. Block Diagram

9.1. Control Block Diagram

9.2. Power (1 of 2) Block Diagram

9.3. Power (2 of 2) Block Diagram

9.4. Video Block Diagram

9.5. DVI Block Diagram

9.6. Audio Block Diagram

10. Schematic Diagrams

10.1. Schematic Diagram Notice

10.2. A-Board (1 of 3) Schematic Diagram

10.3. A-Board (2 of 3) Schematic Diagram

10.4. A-Board (3 of 3) Schematic Diagram

10.5. P-Board Schematic Diagram

10.6. D-Board (1 of 2)Schematic Diagram

10.7. D-Board (2 of 2)Schematic Diagram

10.8. DG-Board (1 of 6) Schematic Diagram

10.9. DG-Board (2 of 6) Schematic Diagram

10.10. DG-Board (3 of 6) Schematic Diagram

10.11. DG-Board (4 of 6) Schematic Diagram

10.12. DG-Board (5 of 6) Schematic Diagram

10.13. DG-Board (6 of 6) Schematic Diagram

10.14. H-Board Schematic Diagram

10.15. L-Board Schematic Diagram

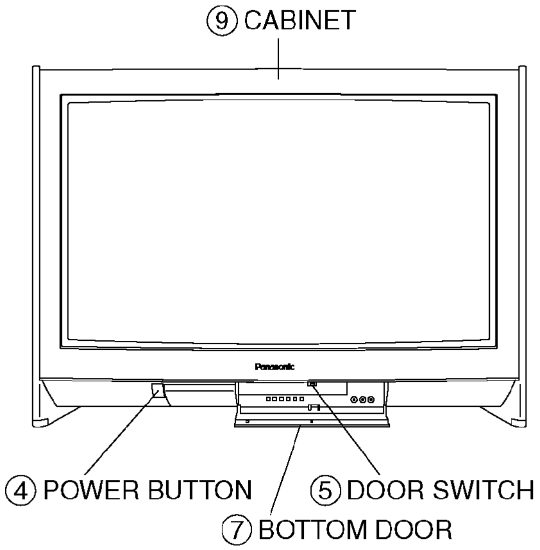
10.16. G and K-Board Schematic Diagram

11. Parts Location

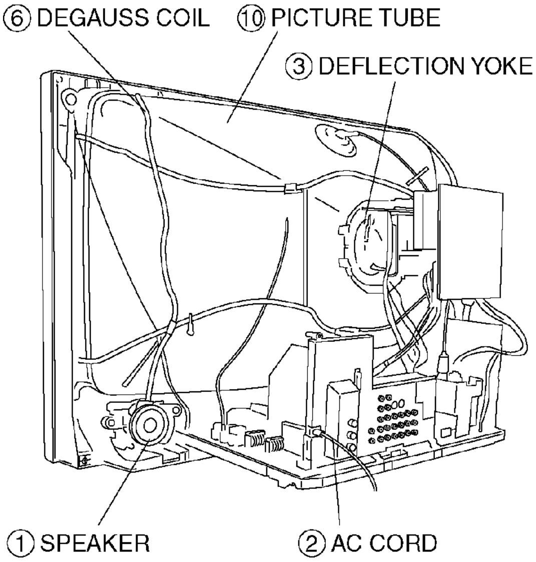
Note:

The number on mechanical parts indicates Ref. No. Mechanical Replacement Parts List

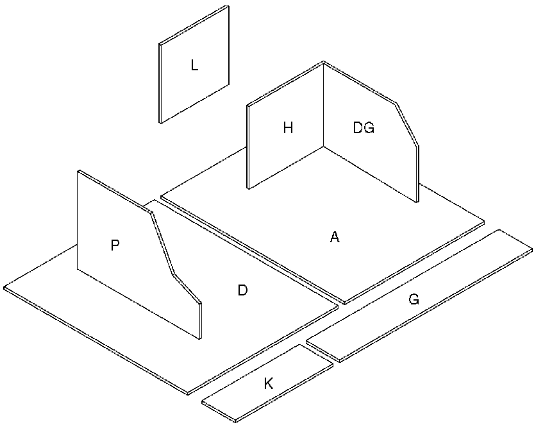
- Front View



- Rear View


⑥ DEGAUSS COIL
⑩ PICTURE TUBE
③ DEFLECTION YOKE
① SPEAKER
② AC CORD

- Chassis Board Layout View



12. Mechanical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	EAST12D07C6	SPEAKER	2	
	EUR7603ZD0	REMOCON TRANSMITTER	1	
	J2FB00000001	2RF SPLITTER	1	
2	K2CB2DZ00006	AC CORD	1	⚠
3	KDY4WHE97F	DEFLECTION YOKE	1	⚠
4	TBXA37102	POWER BUTTON	1	
5	TEK6935	DOOR SWITCH	1	
	TEKC011	DAMPER	1	
	TES4G204	SPRING	1	
	TES6583	SPRING FOR TR	1	
	TESA031	SPRING	2	
	TESD020	COIL SPRING	1	
	TESH023	SPRING	1	
	THEA068N	SCREW	2	
	THNA004N	SCREW	2	K1YGZZ000007
	THT1062	SCREW	4	
	THTA006Z	SCREW	14	
	TJS169990	7P CONNECTOR	4	K1LB07A00022
	TKKL5124	FOCUS COVER	1	
	TKPA68403	CONTROL PANEL(RIGHT)	1	
	TKPA68503	CONTROL PANEL(LEFT)	1	
	TKPA69305	BOTTOM PANEL(RIGHT)	1	
	TKPA69405	BOTTOM PANEL(LEFT)	1	
	TKPA74901	REAR BRAKET	1	
	TMK15943	INSULATOR	1	
	TMM16480-1	CLAMPER	1	
	TMM16497-1	CLAMPER	2	
	TMM25403	CLAMPER	2	
	TMM7443-3	CLAMPER	1	
	TMM7468-1	CLAMPER	1	
	TMME015	CLAMPER	4	
	TMME047	CLAMPER	3	
	TMME055	CLAMPER	4	
	TMME201	INSULATOR	2	
	TMMJ032	DY WEDGE	4	
	TMMJ070	SPEAKER RUBBER	4	
	TMMX004	VR COVER	2	
	TMWA036	FRONT BRAKET	1	
	TMWJ025	LED HOLDER	1	
	TMZK5014	SPEAKER BRAKET(LEFT)	1	
	TMZK5015	SPEAKER BRAKET(RIGHT)	1	
	TPCB38601	CARTON BOX	1	
	TPDA0753	CUSHION (TOP)	1	
	TPDA0754	CUSHION (BOOTOM)	1	
	TPDA0755	CUSHION (REAR)	1	
	TPEH007-3	PROTECT COVER	1	
	TPEH033	PROTECT COVER	1	
	TQBC0611	INSTRUCTION BOOK(ENGLISH)	1	⚠
	TQBC0613	INSTRUCTION BOOK(FRENCH)	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	TQBC7060-2	SERVICE CENTER LIST	1	
	TSM10032-3	MAGNET	1	
	TSN63115-4	MAGNET	6	
6	TSPA175	DEGAUSSING COIL	1	⚠
7	TTPA0312	BOTTOM DOOR	1	
	TTPA0313	SPEAKER PANEL(LEFT)	1	
	TTUA0680	REAR COVER	1	⚠
9	TTYA0582	CABINET	1	
10	W86LXK685X	PICTURE TUBE	1	⚠
	XSN3+8	SCREW	2	
	XTB4+12A	SCREW	1	
	XTB4+15A	SCREW	8	
	XTB4+15AFZ	SCREW	6	
	XTV3+12G	SCREW	9	
	XTV3+6J	SCREW	1	
	XTV3+8J	SCREW	2	
	XTW3+10T	SCREW	13	
	XTW3+12T	SCREW	1	
	XTW3+8T	SCREW	10	
	XTW4+Z15D	SCREW	4	
	XTWT983G	SCREW	3	
	XYN3+C8	SCREW	1	
	XYN3+F12	SCREW	3	
	XYN3+F8	SCREW	8	
	XYN3+J10	SCREW	1	
	XYN3+J6	SCREW	1	
	XYN3+J8	SCREW	2	
	XZBT6506	POLY BAG	1	

13. Replacement Parts List

13.1. Replacement Parts List Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

Type Allowance

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z, 50V

Type Allowance

Type	Allowance
C : Carbon	F : ±1%
F : Fuse	G : ±2%
M : Metal Oxide	J : ±5%
Metal Film	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

Type	Allowance
C : Ceramic	C : ±0.25pF
E : Electrolytic	D : ±0.5pF
P : Polyester	F : ±1pF
Polyprop	G : ±3pF
lene	J : ±5pF
T : Tantalum	K : ±10pF
	L : ±15pF
	M : ±20pF
	P : +100%, -0%
	Z : +80%, -20%

13.2. Electrical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A1	TJS3A9880	8P CONNECTOR	1	K1KA08A00179
A2,A3	K1KB10A00091	10P CONNECTOR	2	
A6	TJSF20016	16P CONNECTOR	1	K1KB16A00050
A8,A9	TJSF20016	16P CONNECTOR	2	K1KB16A00050
A10	K1KA02A00188	2P MINI	1	
A11	TJSF17325	25P CONNECTOR	1	K1KB25B00006
A12	K1KB40A00088	40P CONNECTOR	1	
A15	TJS1A8140	PHONO PIN (8P)	1	K1KA08B00064
A16	TJS3A9640	3P CONNECTOR	1	K1KA03A00171
AC1,C2	TJS3A9630	CONNECTOR	2	K1KA03A00183
C002	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C003	ECA0JM471	E 470UF, 6.3V	1	
C004	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C005	ECA1CM470	E 47UF, 16V	1	
C006	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C007	ECA1VM101	E 100UF, 35V	1	
C008	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C010	ECA1HM4R7	E 4.7UF, 50V	1	
C011	ECJ2XB1H392K	C 3900PF, K, 50V	1	
C012	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C013	ECJ2XC1H101J	C 100PF, J, 50V	1	
C014	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C015	ECJ2XC1H101J	C 100PF, J, 50V	1	
C016	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C018	ECJ2XC1H270J	C 27PF, J, 50V	1	
C019	ECA1HM010	E 1UF, 50V	1	
C020	ECJ2XC1H270J	C 27PF, J, 50V	1	
C021	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C022	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C023	ECA1HM010	E 1UF, 50V	1	
C024	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C025	ECJ2XC1H101J	C 100PF, J, 50V	1	
C026	ECEA1CN470U	E 47UF, 16V	1	
C027,28	ECJ2XC1H220J	C 22UF, J, 50V	2	
C029	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C030	ECEA1CN470U	E 47UF, 16V	1	
C032	ECA1HM010	E 1UF, 50V	1	
C033	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C034	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C037	ECA0JM222	E 2200UF, 6.3V	1	
C038	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C039	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C041,42	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C043,44	ECJ2XC1H561J	C 560PF, J, 50V	2	
C045,46	ECJ2XC1H471J	C 470PF, J, 50V	2	
C047	ECA1CM330	E 33UF, 16V	1	
C048	ECA1HMR22	E 0.22UF, 50V	1	
C049	ECA1CM101	E 100UF, 16V	1	
C051	ECA1VM470	E 47UF, 35V	1	
C052	ECA1HM4R7	E 4.7UF, 50V	1	
C053	ECA1HM2R2	E 2.2UF, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C054	ECA1HM4R7	E 4.7UF, 50V	1	
C055	ECA1VM470	E 47UF, 35V	1	
C056	EEUFC1A471	E 470UF, 10V	1	
C059,60	ECJ2XC1H101J	C 100PF, J, 50V	2	
C061	ECA1HMR22	E 0.22UF, 50V	1	
C062	ECA1HM2R2	E 2.2UF, 50V	1	
C064	ECA1HM010	E 1UF, 50V	1	
C067	ECA1HM4R7	E 4.7UF, 50V	1	
C405	ECA1HM102	E 1000UF, 50V	1	
C406	ECQV1H105JM	P 1UF, J, 50V	1	
C407	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C408,09	ECA1EM471	E 470UF, 25V	2	
C411	ECQB1H472JF	P 4700PF, J, 50V	1	
C412	ECQB1224KF	P 0.22UF, 100V	1	
C413	ECA1HM010	E 1UF, 50V	1	
C414	ECQB1H272JF	P 2700PF, J, 50V	1	
C415	ECQB1473KF	P 0.047UF, K,100V	1	
C416	ECQB1H472JF	P 4700PF, J, 50V	1	
C419	EEUNA1A470	E 47UF, 10V	1	
C420,21	ECA1CM101	E 100UF, 16V	2	
C422	ECA1HM010	E 1UF, 50V	1	
C438	ECQB1H102JF	P 1000PF, J, 50V	1	
C439	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C440	ECA1HM100	E 10UF, 50V	1	
C450	ECA1CM331	E 330UF, 16V	1	
C454	ECA1HM221	E 220UF, 50V	1	
C457	ECEA1EN4R7U	E 4.7UF, 25V	1	
C479	ECA1CM101	E 100UF, 16V	1	
C480,81	ECJ2VF1C104Z	C 0.1UF, Z, 16V	2	
C499	ECA1VM100	E 10UF, 35V	1	
C501	ECA1VM470	E 47UF, 35V	1	
C502	ECQV1H104JM	P 0.1UF, J, 50V	1	
C503	ECKD2H102KB2	C 1000PF, K,500V	1	
C504	ECA1VM470	E 47UF, 35V	1	
C505	ECQV1H104JM	P 0.1UF, J, 50V	1	
C506	ECQV1H105JM	P 1UF, J, 50V	1	
C507	ECEA2CNR47S	E 0.47UF, 160V	1	
C508	ECQV1H104JM	P 0.1UF, J, 50V	1	
C509	ECKD3D222KBP	C 2200PF, K, 2KV	1	
C510	ECWH20392JVY	P 3900PF, J, 2KV	1	
C511	ECWH20102JVY	P 1000PF, J, 2KV	1	
C512	ECA1HMR47	E 0.47UF, 50V	1	
C513	ECWH20392JVY	P 3900PF, J, 2KV	1	
C514	ECQM4822JZ	P 8200PF, J,400V	1	
C515	ECKD3A222KBP	C 2200PF, K, 1KV	1	
C516	ECQB1H183JF	P 0.018UF, J, 50V	1	
C517	ECCF1H390JC	C 39PF, J, 50V	1	
C518,19	ECKD3D681KBN	C 680PF, K, 2KV	2	
C520	ECWH16332JVY	P 3300PF,J,1.6KV	1	
C521	ECWF4184RJB	P 0.18UF, J,400V	1	
C522	ECA1CM101	E 100UF, 16V	1	
C523	ECA1VM470	E 47UF, 35V	1	
C524	ECQB1224JF	P 0.22UF, J,100V	1	
C525	EEUNA1E220	E 22UF, 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C526	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C527	ECQV1H224JM	P 0.22UF, J, 50V	1	
C528	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C529	ECQB1H823JF	P 0.082UF, J, 50V	1	
C531	ECKD3D821KBP	C 820PF, K, 2KV	1	
C532	ECQV1H104JM	P 0.1UF, J, 50V	1	
C534	ECKF1H103ZF	C 0.01UF, Z, 50V	1	
C535	ECA1VM100	E 10UF, 35V	1	
C536	ECEA1HN100U	E 10UF, 50V	1	
C537	ECQB1H473JF	P 0.047UF, J, 50V	1	
C538,39	ECA1CM471	E 470UF, 16V	2	
C540	ECA1CM101	E 100UF, 16V	1	
C541,42	ECQM6223JZ	P 0.022UF, J,600V	2	
C543	ECKD3D151KBP	C 150PF, K, 2KV	1	
C544	ECA1HM010	E 1UF, 50V	1	
C545	ECKD3D471KBP	C 470PF, K, 2KV	1	
C546	ECKD3D102KBP	C 1000PF, K, 2KV	1	
C547	ECKD3A102KBP	C 1000PF, K, 1KV	1	
C548	ECQE2224JF	P 0.22UF, J,250V	1	
C550	ECCD3A470KGE	C 47PF, K, 1KV	1	
C551	ECKD3A332KBP	C 3300PF, K, 1KV	1	
C553	ECA0JM101	E 100UF, 6.3V	1	
C554	ECA1VM101	E 100UF, 35V	1	
C555	ECKD3A102KBP	C 1000PF, K, 1KV	1	
C556	ECA1VM470	E 47UF, 35V	1	
C557	ECQB1H102JF	P 1000PF, J, 50V	1	
C558	ECJ2XC1H390J	C 39PF, J, 50V	1	
C559	ECQB1H102JF	P 1000PF, J, 50V	1	
C560	ECA1HM100	E 10UF, 50V	1	
C561	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C562	ECA1VM470	E 47UF, 35V	1	
C563	ECA2EM330	E 33UF, 250V	1	
C564	ECA1VM470	E 47UF, 35V	1	
C567	ECA2CM101	E 100UF, 160V	1	
C568	ECWF2224JSR	P 0.22UF, J,250V	1	⚠
C569	ECWF4683RJB	P 0.018UF, J,400V	1	
C570	ECA1VM470	E 47UF, 35V	1	
C571	ECKDHT332KB	C 3300PF, K,500V	1	
C573	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C574	ECA1VM471	E 470UF, 35V	1	
C575	ECA1CM101	E 100UF, 16V	1	
C576	ECKD3A471KBP	C 470PF, K, 1KV	1	
C577	ECQM6223JZ	P 0.022UF, J,600V	1	
C578	ECKD3D681KBP	C 680PF, K, 2KV	1	
C580	ECQB1H223JF	P 0.022UF, J, 50V	1	
C581	EEUFC1A471	E 470UF, 10V	1	
C582	ECA1CM221	E 220UF, 16V	1	
C583	ECKF1H103ZF	C 0.01UF, Z, 50V	1	
C584	ECKD3A471KBP	C 470PF, K, 1KV	1	
C589	ECQE6184JF	P 0.18UF, J,630V	1	
C590	ECKF1H471KB	C 470PF, K, 50V	1	
C594	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C595	ECA1CM221	E 220UF, 16V	1	
C651	ECQB1H102JF	P 1000PF, J, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C652	ECA1HM220	E 22UF, 50V	1	
C653	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C654	ECQB1H102JF	P 1000PF, J, 50V	1	
C655	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C660	ECA1HM2R2	E 2.2UF, 50V	1	
C702	ECQB1H103JF	P 0.01UF, J, 50V	1	
C705	ECQB1H562JF	P 5600PF, J, 50V	1	
C706	ECQB1H222JF	P 2200PF, J, 50V	1	
C707	ECQB1H223JF	P 0.022UF, J, 50V	1	
C713	ECKD2H222KB5	C 2200PF, K,500V	1	
C737	ECQE2103KF	P 0.01UF, K,250V	1	
C801	ECQU2A104MLA	P 0.010PF, M,250V	1	⚠
C802-04	ECQU2A823BN9	P 0.082UF, 250V	3	⚠
C805-07	ECKD2H472PU7	C 4700PF, P,500V	3	
C808	ECQB1H102JF	P 1000PF, J, 50V	1	
C809	ECQB1H333JF	P 0.033UF, J, 50V	1	
C810,11	EETHC2D821J	E 820UF, 200V	2	
C812	ECA1CM471	E 470UF, 16V	1	
C813	ECA1HM010	E 1UF, 50V	1	
C814	ECKD2H472PU7	C 4700PF, P,500V	1	
C815	ECA1EM471	E 470UF, 25V	1	
C816	ECKD3D102KBP	C 1000PF, K, 2KV	1	
C817	ECQB1H332JF	P 3300PF, J, 50V	1	
C819	ECCF1H221JC	C 220PF, J, 50V	1	ECCF1H221JC4
C820	ECA1EHG221	E 220UF, 25V	1	
C821	ECKD3D272KBP	C 2700PF, K, 2KV	1	
C822	ECQB1H393JF3	P 0.039UF, J, 50V	1	
C823	ECQB1H222JF	P 2200PF, J, 50V	1	
C824	ECKD3D122KBP	C 1200PF, K, 2KV	1	
C826	ECA1VM221	E 220UF, 35V	1	
C827	ECQB1H333JF	P 0.033UF, J, 50V	1	
C828	ECKD3A331KBP	C 330PF, K, 1KV	1	
C830	EETHC2C681BB	E 680UF, 160V	1	⚠
C831	ECKD3D102KBP	C 1000PF, K, 2KV	1	
C834	EEUFC1V222	E 2200UF, 35V	1	
C837	ECA2EM470	E 47UF, 250V	1	
C838	EEUFC1E272	E 2700UF, 25V	1	
C839	ECKD3A151KBP	C 150PF, K, 1KV	1	
C840	ECA1EMH471	E 470UF, 25V	1	
C841	ECA1VHG102	E 1000UF, 35V	1	
C842	ECKD3A331KBP	C 330PF, K, 1KV	1	
C843	ECA1VHG102	E 1000UF, 35V	1	
C844	ECKD3A471KBP	C 470PF, K, 1KV	1	
C845	ECA1CM101	E 100UF, 16V	1	
C846	ECA1HM010	E 1UF, 50V	1	
C847	ECA1VM470	E 47UF, 35V	1	
C848	ECEA1CN101U	E 100UF, 16V	1	
C850	EEUFC1E272	E 2700UF, 25V	1	
C856	ECQU2A103MLA	P 0.010PF, M,250V	1	⚠
C857	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C858	ECA2DM470	E 470UF, 200V	1	
C859	ECA1EHG471	E 470UF, 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C860,61	ECKCNA222MEB	C 2200PF, M	2	⚠
C869	ECA2EM470	E 47UF, 250V	1	
C870	ECKD3D102KBP	C 1000PF, K, 2KV	1	
C871,72	ECJ2VF1H103Z	C 0.01UF, Z, 50V	2	
C876	ECA1EM471	E 470UF, 25V	1	
C877	EEUFC1A471	E 470UF, 10V	1	
C878	ECA1EM221	E 220UF, 25V	1	
C879	EEUFC1A471	E 470UF, 10V	1	
C880	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C885	ECA1VM471	E 470UF, 35V	1	
C886	EEUFC1C471	E 470UF, 16V	1	
C888	ECA1EM101	E 100UF, 25V	1	
C889	ECA1CM101	E 100UF, 16V	1	
C890	ECA1CM221	E 220UF, 16V	1	
C891	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C892	ECA0JM221	E 220UF, 6.3V	1	
C893	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C894	ECA1VM101	E 100UF, 35V	1	
C895	ECA1CM221	E 220UF, 16V	1	
C896	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C897	ECA1EM471	E 470UF, 25V	1	
C898,99	ECJ2XB1H103K	C 0.01UF, K, 50V	2	
C900	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C901	ECJ2XC1H102K	C 1000PF, K, 50V	1	
C903	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C904	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C905	ECA1CM221	E 220UF, 16V	1	
C906	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C910	ECQB1223KF	P 0.022UF, K,100V	1	
C911	ECQM4103KZ	P 0.01UF, K,400V	1	
C912	ECA2CM330	E 33UF, 160V	1	
C914	ECQB1223KF	P 0.022UF, K,100V	1	
C915	ECA2DHG330	E 33UF, 200V	1	
C916,17	ECA1CM101	E 100UF, 16V	2	
C918	ECA1CM221	E 220UF, 16V	1	
C919,20	ECJ2XC1H102K	C 1000PF, K, 50V	2	
C927	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C1051	ECKF1H103ZF	C 0.01UF, Z, 50V	1	
C1052	ECA1HM470	E 47UF, 50V	1	
C2202	ECA1HM2R2	E 2.2UF, 50V	1	
C2203	ECA1HM4R7	E 4.7UF, 50V	1	
C2204	ECSF1CE106V	T 10UF, 16V	1	
C2205	ECA1HM010	E 1UF, 50V	1	
C2206	ECQB1H223JF	P 0.022UF, J, 50V	1	
C2207	ECSF1CE335V	T 3.3UF, 16V	1	
C2208-10	ECJ2VB1C104K	C 0.1UF, K, 16V	3	
C2211	ECA1HM100	E 10UF, 50V	1	
C2212	ECQB1H473JF	P 0.047UF, J, 50V	1	
C2215	ECA1CM101	E 100UF, 16V	1	
C2218	ECA1HMR47	E 0.47UF, 50V	1	
C2301	EEUFC1E222	E 2200UF, 25V	1	
C2302	ECJ2VF1E104Z	C 0.1UF, Z, 25V	1	
C2303	ECA1HM2R2	E 2.2UF, 50V	1	
C2304	ECA1VM470	E 47UF, 35V	1	

[illegible]	[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2305	ECA1VM100	E 10UF, 35V	1	
C2306	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C2307	ECA1HM2R2	E 2.2UF, 50V	1	
C2308-11	ECQV1H104JM	P 0.1UF, J, 50V	4	
C2312,13	ECEA1CN100U	E 10UF, 16V	2	
C2314	EEUFC1E102	E 1000UF, 25V	1	
C2322-25	ECEA1CN100U	E 10UF, 16V	4	
C2326	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2327	ECA1HM220	E 22UF, 50V	1	
C2328	ECA1EM101	E 100UF, 25V	1	
C2329	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C2330	ECEA1CN100U	E 10UF, 16V	1	
C2331	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C2332	ECJ2XB1H223K	C 0.022UF, K, 50V	1	
C2333	ECJ2XB1H332K	C 3300PF, K, 50V	1	
C2334	ECJ2VF1C684Z	C 0.68UF, Z, 16V	1	
C2335	ECEA1CN100U	E 10UF, 16V	1	
C2336	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C2337	ECJ2XB1H223K	C 0.022UF, K, 50V	1	
C2338	ECJ2XB1H332K	C 3300PF, K, 50V	1	
C2339	ECJ2VF1C684Z	C 0.68UF, Z, 16V	1	
C2340	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C2341	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C2342,43	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C2344	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C2345-47	ECJ2VF1C105Z	C 1UF, Z, 16V	3	
C2348	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C2349	ECA1CM221	E 220UF, 16V	1	
C2366	ECA1CM101	E 100UF, 16V	1	
C2367	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2368	ECA1CM101	E 100UF, 16V	1	
C2369	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2370	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C2371,72	ECEA1CN100U	E 10UF, 16V	2	
C2373,74	ECA1CM100	E 10UF, 16V	2	
C2375-78	ECJ2VF1C105Z	C 1UF, Z, 16V	4	
C2379,80	ECEA1CN220U	E 22UF, 16V	2	
C2381,82	ECJ2VB1C104K	C 0.1UF, K, 16V	2	
C2383	ECA1CM101	E 100UF, 16V	1	
C2384	ECA1CM220	E 22UF, 16V	1	
C2385	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C2504	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2505	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C2509	ECA1VM470	E 47UF, 35V	1	
C3031	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3032	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3033	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3034	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3035	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3036	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3037	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3038	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3039	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C3040-42	ECJ2VF1C105Z	C 1UF, Z, 16V	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3043	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3044	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3045	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3046	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C3047,48	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C3049	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3050	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3051	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3052,53	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C3054	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3055	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3057	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3058	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3059	ECA1CM471	E 470UF, 16V	1	
C3060,61	ECJ2XB1H152K	C 1500PF, K, 50V	2	
C3062-69	ECJ2VF1C105Z	C 1UF, Z, 16V	8	
C3154,55	ECA1HM010	E 1UF, 50V	2	
C3158,59	ECKF1H152KB	C 1500PF, K, 50V	2	
C3801	ECA1CM101	E 100UF, 16V	1	
C3802	ECA1VM470	E 47UF, 35V	1	
C3803	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C3804	ECQE2104KF	P 0.1UF, K,250V	1	
C3805	ECA2DM330	E 330UF, 200V	1	
C3806,07	ECQE2474KF	P 0.47UF, K,250V	2	
C3808	ECKD3D332KBN	C 3300PF, K, 2KV	1	
C3809	ECQE2474KF	P 0.47UF, K,250V	1	
C3811	ECQE2103KF	P 0.01UF, K,250V	1	
C3812-14	ECQE2104KF	P 0.1UF, K,250V	3	
C3815-17	ECQE2103KF	P 0.01UF, K,250V	3	
C3822-24	ECQE2104KF	P 0.1UF, K,250V	3	
C3825	ECA2EM010	E 1UF, 250V	1	
C3826	ECA1VM470	E 47UF, 35V	1	
C3827,28	ECJ2XB1H103K	C 0.01UF, K, 50V	2	
C3829	ECKD2H102KB2	C 1000PF, K,500V	1	
C3830	ECA2EM470	E 47UF, 250V	1	
C4301-11	ERJ3GEYJ0R00	M 0 OHM, 1/16W	11	
C4312	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C4313,14	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
C4315	EEVHB1C470	E 47UF, 16V	1	
C4316	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4317	EEVHB1C470	E 47UF, 16V	1	
C4318	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4319	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
C4320	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4321	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
C4322	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4323,24	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
C4325,26	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4327-29	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
C4330,31	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C4332	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4333	EEVHB0J101P	E 100UF, 6.3V	1	
C4334	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4335,36	ECJ1VF1C105Z	C 1UF, Z, 10V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4337	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
C4338	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4339	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
C4340	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4341	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4342	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
C4343	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4344,45	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
C4347	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4349,50	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4351	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4352,53	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4354,55	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C4356,57	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C4358	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4359	EEVHB1A101	E 100UF, 10V	1	
C4360	EEVHB1C100R	E 10UF, 16V	1	
C4361	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C4362-66	ECJ1VF1C105Z	C 1UF, Z, 10V	5	
C4501	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C4502	EEVHB1A330	E 33UF, 10V	1	
C4503	ECJ1XC1H050D	C 5PF, D, 50V	1	
C4504,05	ECJ1XC1H470J	C 47PF, J, 50V	2	
C4506	ECJ1XC1H050D	C 5PF, D, 50V	1	
C4507,08	ECJ1XC1H220J	C 22PF, J, 50V	2	
C4509,10	ECJ1XC1H121J	C 120PF, J, 50V	2	
C4511	ECJ1XC1H220J	C 22PF, J, 50V	1	
C4512	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4513	ECJ1XC1H101J	C 100PF, J, 50V	1	
C4514	EEVHB1A330	E 33UF, 10V	1	
C4515	ECJ3XB1C105K	C 1UF, K, 16V	1	
C4517	ECJ3XB1C105K	C 1UF, K, 16V	1	
C4519	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4521	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4522	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4523	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C4525	EEVHB0G101R	E 100UF 4V	1	
C4527,28	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C4529	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4530-32	ECJ1VF1A105Z	C 1UF, Z, 10V	3	
C4533	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4534	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4535,36	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4537	EEVHB0G101R	E 100UF 4V	1	
C4539	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4540,41	ECJ1VB1H103K	C 0.01UF, K, 50V	2	
C4543-48	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	
C4549	EEVHB1A101	E 100UF, 10V	1	
C4550	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4551	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4552	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4553-59	ECJ1XF1C104Z	C 0.1UF, Z, 16V	7	
C4561	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4562	ECJ1VB1H103K	C 0.01UF, K, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4563	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4565-79	ECJ1XF1C104Z	C 0.1UF, Z, 16V	15	
C4580	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4581,82	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4583	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4584,85	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4586	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4587	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4590	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C4591	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4592,93	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4595	ECJ1VB1C473K	C 0.047UF, K, 16V	1	
C4596-00	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4601	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4602	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4603	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4604	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4606	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4607	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4608	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4609	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4611	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4612-14	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4615	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4616	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4617	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4618	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4619	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4620	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4621	ECJ1VB1H471K	C 470PF, K, 50V	1	
C4622	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4623-32	ECJ1VF1A105Z	C 1UF, Z, 10V	10	
C4633-35	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4636	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4637,38	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4639-41	ECJ1VF1A105Z	C 1UF, Z, 10V	3	
C4642	EEVHB0G101R	E 100UF 4V	1	
C4643	ECJ1XC1H151J	C 150PF, J, 50V	1	
C4644	ECJ2YB0J335K	C 3.3UF, Z,6.3V	1	
C4645	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4646	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4647	ECJ1XC1H471J	C 470PF, J, 50V	1	
C4648,49	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4650	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4651,52	ECJ1XC1H150J	C 15PF, J, 50V	2	
C4653	EEVHB0G101R	E 100UF 4V	1	
C4654	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4655	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4657	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4658	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4659	ECHU1C223JA5	P 0.022UF, 16V	1	
C4660	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4661	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4662	ECHU1C223JA5	P 0.022UF, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4663	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4665-69	ECJ1XB0J105K	C 1UF, K, 16V	5	
C4670	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4671,72	ECJ1XC1H470J	C 47PF, J, 50V	2	
C4673	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4674-77	ECJ1XB1C104K	C 0.1UF, Z, 16V	4	
C4678,79	ECJ1XC1H220J	C 22PF, J, 50V	2	
C4680	ECJ1XC1H050D	C 5PF, D, 50V	1	
C4681,82	EEVHB1A330	E 33UF, 10V	2	
C4683	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4684	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4685,86	ECJ1XC1H121J	C 120PF, J, 50V	2	
C4687	ECJ1VB1C563K	C 0.056UF, K, 16V	1	
C4691	ECJ1XC1H101J	C 100PF, J, 50V	1	
C4693-96	ECJ1XB0J105K	C 1UF, K, 16V	4	
C4697	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4699	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4700	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4701	EEVHB1C470	E 47UF, 16V	1	
C4702	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4703,04	EEVHB1A330	E 33UF, 10V	2	
C4705	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4706	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4707	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4708	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4710	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4711	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4712	EEVHB0G470	E 47UF, 4V	1	
C4714	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4715	EEVHB0G221P	E 220UF, 4V	1	
C4717	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4718-28	ECJ1XF1C104Z	C 0.1UF, Z, 16V	11	
C4729,30	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4731-33	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4734	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4735	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4736	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4737	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4738-42	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4743	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4744-46	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4747	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4748	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4750-55	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	
C4756	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4757	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4758,59	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4760,61	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4762,63	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4764	ECJ1VB1H471K	C 470PF, K, 50V	1	
C4765-69	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4770	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4771-75	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4776	ECJ1VF1C105Z	C 1UF, Z, 10V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4777-84	ECJ1XF1C104Z	C 0.1UF, Z, 16V	8	
C4785	EEVHB0G101R	E 100UF 4V	1	
C4786	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4787	EEFCD0G560R	56UF,	1	
C4788	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4789-92	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C4793	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4794-96	ECJ1VB1H103K	C 0.01UF, K, 50V	3	
C4797	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4798,99	ECJ1VB1H103K	C 0.01UF, K, 50V	2	
C4800	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4801	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4802	ECJ1VB1C563K	C 0.056UF, K, 16V	1	
C4806,07	ECJ1VB1H103K	C 0.01UF, K, 50V	2	
C4808-10	ECJ1XB0J105K	C 1UF, K, 16V	3	
C4811	ECJ1XC1H820J	C 82PF, J, 50V	1	
C4814	ECJ1VB1H272K	C 2700PF, K, 50V	1	
C5003	EEVHB1C100R	E 10UF, 16V	1	
C5004	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5007	EEVHB1C100R	E 10UF, 16V	1	
C5008	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5010	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5011	EEVHB1C100R	E 10UF, 16V	1	
C5012	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5013	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5014	EEVHB1C100R	E 10UF, 16V	1	
C5015	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5016-19	ECJ1XC1H101J	C 100PF, J, 50V	4	
C5020	EEVHB1C100R	E 10UF, 16V	1	
C5021	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5022,23	ECJ1XC1H101J	C 100PF, J, 50V	2	
C5024	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C5025	EEVHB1C100R	E 10UF, 16V	1	
C5027	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5028	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5029	EEVHB1C100R	E 10UF, 16V	1	
C5030	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5031	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5032	EEVHB1C100R	E 10UF, 16V	1	
C5033	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5034	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5035	EEVHB1C100R	E 10UF, 16V	1	
C5036	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5037	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5038	EEVHB1C100R	E 10UF, 16V	1	
C5039	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5040	EEVHB1C470	E 47UF, 16V	1	
C5041	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5042	EEVHB1C100R	E 10UF, 16V	1	
C5043	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5044,45	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C5071	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5072	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5073	ECJ1VB1H103K	C 0.01UF, K, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5074	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5077	**EEVHB1A330**	**E 33UF, 10V**	**1**	
C5078	**EEVHB1C100R**	**E 10UF, 16V**	**1**	
C5079	**EEVHB1A330**	**E 33UF, 10V**	**1**	
C5080	**ECJ2VB1C104K**	**C 0.1UF, K, 16V**	**1**	
C5081	**ECJ2VF1C105Z**	**C 1UF, Z, 16V**	**1**	
C5085	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5086	**ECJ1VB1H103K**	**C 0.01UF, K, 50V**	**1**	
C5102,03	**EEVHB1A330**	**E 33UF, 10V**	**2**	
C5104	**EEVHB1C100R**	**E 10UF, 16V**	**1**	
C5105-07	**ECJ2VB1C104K**	**C 0.1UF, K, 16V**	**3**	
C5118	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5119	**EEVHB1C470**	**E 47UF, 16V**	**1**	
C5126-31	**ECJ2VB1C104K**	**C 0.1UF, K, 16V**	**6**	
C5132	**EEVHB1C470**	**E 47UF, 16V**	**1**	
C5133	**ECJ1VF1H103Z**	**C 0.01UF, Z, 50V**	**1**	
C5134	**ECJ2XB1H103K**	**C 0.01UF, K, 50V**	**1**	
C5135	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5136	**ECJ1VF1A105Z**	**C 1UF, Z, 10V**	**1**	
C5140	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5149	**ECJ1XB1C104K**	**C 0.1UF, Z, 16V**	**1**	
C5150	**ECJ2VB1C104K**	**C 0.1UF, K, 16V**	**1**	
C5152-54	**ECJ1XB1H102K**	**C 1000UF, Z, 50V**	**3**	
C5805	**ECA1VM470**	**E 47UF, 35V**	**1**	
C5808	**ECQV1H334JM**	**P 0.33UF, J, 50V**	**1**	
D001	**MA3036H**	**ZENER DIODE**	**1**	**MAZ30360H**
D002	**MA704**	**DIODE**	**1**	**MA3X704**
D003	**MA3030L**	**ZENER DIODE**	**1**	
D005	**MA152K**	**DIODE**	**1**	**MA3X152K**
D6	**TJSF19916**	**16P CONNECTOR**	**1**	**K1KA16A00119**
D8	**TJSF19916**	**16P CONNECTOR**	**1**	**K1KA16A00119**
D009	**MA165**	**DIODE**	**1**	**MA2C165**
D9	**TJSF19916**	**16P CONNECTOR**	**1**	**K1KA16A00119**
D010	**MA4030M**	**ZENER DIODE**	**1**	**MAZ40300M**
D011	**MA4036M**	**ZENER DIODE**	**1**	**MAZ40360M**
D11	**TJS5A9420**	**8P CONNECTOR**	**1**	**K1KB08A00054**
D012	**MA4036M**	**ZENER DIODE**	**1**	**MAZ40360M**
D12	**TJS5A9420**	**8P CONNECTOR**	**1**	**K1KB08A00054**
D13	**K1KA05A00139**	**5P CONNECTOR**	**1**	
D14	**TJS5A9420**	**8P CONNECTOR**	**1**	**K1KB08A00054**
D018	**MA4036M**	**ZENER DIODE**	**1**	**MAZ40360M**
D050,51	**MA3030L**	**ZENER DIODE**	**2**	
D402	**MA4270M**	**ZENER DIODE**	**1**	**MAZ42700M**
D406	**ERA15-02**	**DIODE**	**1**	**B0EAKM000016**
D407,08	**MA165**	**DIODE**	**2**	**MA2C165**
D410,11	**MA165**	**DIODE**	**2**	**MA2C165**
D452	**MA165**	**DIODE**	**1**	**MA2C165**
D467	**MA165**	**DIODE**	**1**	**MA2C165**
D468	**MA4062M**	**ZENER DIODE**	**1**	**MAZ40620M**
D471	**MA165**	**DIODE**	**1**	**MA2C165**
D477	**MA29WB**	**DIODE**	**1**	
D501	**MA4150M**	**ZENER DIODE**	**1**	**MAZ41500M**
D503	**D1NL40V70**	**DIODE**	**1**	**B0HALP000002**

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D504	AK04	DIODE	1	B0JAME000037
D507	ERA18-02	DIODE	1	B0AALH000001
D508	EG01C	DIODE	1	B0HAGV000001
D509	MA165	DIODE	1	MA2C165
D510	MA4082M	ZENER DIODE	1	MAZ40820M
D511	RG4C	DIODE	1	B0HANV000014
D512	RK34	DIODE	1	B0JANE000006
D513	ERA18-02	DIODE	1	B0AALH000001
D514,15	AK04	DIODE	2	B0JAME000037
D516	MA4030M	ZENER DIODE	1	MAZ40300M
D517	D1NL40V70	DIODE	1	B0HALP000002
D518	MA165	DIODE	1	MA2C165
D519	D1NL40V70	DIODE	1	B0HALP000002
D521	MA4180M	ZENER DIODE	1	MAZ41800M
D522	MA4100M	ZENER DIODE	1	MAZ41000M
D523	FMRG5HS	DIODE	1	
D526	ERA22-10	DIODE	1	B0EAEV000002
D528	D1NL40V70	DIODE	1	B0HALP000002
D531	MA178	DIODE	1	MA2C178
D532	MA29W-A	DIODE	1	MA2C029WA
D533	MA700A	DIODE	1	MA2C700A
D534	ERA22-10	DIODE	1	B0EAEV000002
D535	MA165	DIODE	1	MA2C165
D540	D1NL40V70	DIODE	1	B0HALP000002
D542	RP1H	DIODE	1	B0HACW000001
D543	MA165	DIODE	1	MA2C165
D544,45	ERA22-06	DIODE	2	B0HAGR000001
D546	AK04	DIODE	1	B0JAME000037
D549	MA165	DIODE	1	MA2C165
D550	MA700A	DIODE	1	MA2C700A
D551	MA4270M	ZENER DIODE	1	MAZ42700M
D554	ERA15-01	DIODE	1	B0EAKL000006
D555	ERA18-02	DIODE	1	B0AALH000001
D566	MA4150LTA	ZENER DIODE	1	MAZ41500LF
D572	MA165	DIODE	1	MA2C165
D577	ERA22-10	DIODE	1	B0EAEV000002
D579	MA4130M	ZENER DIODE	1	MAZ41300M
D601	MA4033H	ZENER DIODE	1	
D701,02	MA29T-A	DIODE	2	MA2C029TA
D704	MA4082M	ZENER DIODE	1	MAZ40820M
D801	RBV-608	DIODE	1	B0FBAT000002 ⚠
D802	MA700A	DIODE	1	MA2C700A
D803	D4DDF1R50001	THERMISTOR	1	⚠
D806	AU01Z	DIODE	1	B0HAGM000011
D807	MA165	DIODE	1	MA2C165
D809	ERZV10D391	VARISTOR	1	⚠
D811	ERA15-01	DIODE	1	B0EAKL000006
D814-16	MA165	DIODE	3	MA2C165
D817	MA4220L	ZENER DIODE	1	
D818	MA4200M	ZENER DIODE	1	MAZ42000M
D824	TMPG10G3	DIODE	1	B0BA01000046 ⚠
D825	RU30A	DIODE	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D827	S2L20U	DIODE	1	B0HANM000015
D828	MA6D90	DIODE	1	MA3D690
D829	S2L20U	DIODE	1	B0HANM000015
D830	B0JBSK000011	DIODE	1	
D831,32	MA165	DIODE	2	MA2C165
D833	MA4110H	ZENER DIODE	1	MAZ41100H
D834	AU02Z	DIODE	1	B0HAKM000004
D836	AU02Z	DIODE	1	B0HAKM000004
D837	MA165	DIODE	1	MA2C165
D839	MA4039M	ZENER DIODE	1	MAZ40390M
D840	MA165	DIODE	1	MA2C165
D841	MA4036M	ZENER DIODE	1	MAZ40360M
D845	MA165	DIODE	1	MA2C165
D846	MA4180M	ZENER DIODE	1	MAZ41800M
D847	MA4360M	ZENER DIODE	1	MAZ43600M
D848	MA165	DIODE	1	MA2C165
D851	MA165	DIODE	1	MA2C165
D861,62	TVSA81004	DIODE	2	B0JAME000009
D866	EG01C	DIODE	1	B0HAGV000001
D867	EG01A	DIODE	1	B0HAGR000006
D871	MA4180M	ZENER DIODE	1	MAZ41800M
D872	MA165	DIODE	1	MA2C165
D874,75	RK34	DIODE	2	B0JANE000006
D876,77	MA165	DIODE	2	MA2C165 ⚠
D878	RK34	DIODE	1	B0JANE000006
D881	TMPG10G3	DIODE	1	B0BA01000046
D883	TMPG10G3	DIODE	1	B0BA01000046
D884	TMPG12G3	DIODE	1	
D889	MA165	DIODE	1	MA2C165
D893,94	MA165	DIODE	2	MA2C165
D898,99	MA165	DIODE	2	MA2C165
D1001	LN21RCPH	LED (RED)	1	
D1051,52	MA165	DIODE	2	MA2C165
D2301	MA4270M	ZENER DIODE	1	MAZ42700M
D2302	B0JAMG000002	DIODE	1	
D2304,05	MA152K	DIODE	2	MA3X152K
D2502	MA152	DIODE	1	
D3001,02	MA3100M	ZENER DIODE	2	MAZ31000M
D3004	MA3100M	ZENER DIODE	1	MAZ31000M
D3006	MA3100M	ZENER DIODE	1	MAZ31000M
D3008-10	MA3100M	ZENER DIODE	3	MAZ31000M
D3012	MA3100M	ZENER DIODE	1	MAZ31000M
D3014	MA3100M	ZENER DIODE	1	MAZ31000M
D3016-30	MA3100M	ZENER DIODE	15	MAZ31000M
D3032	MA3100M	ZENER DIODE	1	MAZ31000M
D3034-38	MA3100M	ZENER DIODE	5	MAZ31000M
D3151-56	MA4100M	ZENER DIODE	6	MAZ41000M
D3159,60	MA4100M	ZENER DIODE	2	MAZ41000M
D3801	MA4062L	ZENER DIODE	1	MAZ40620L
D3802-07	MA188	DIODE	6	MA2C188
D3811	MA188	DIODE	1	MA2C188
D3812	MA4130M	ZENER DIODE	1	MAZ41300M
D3813	ERA22-04	DIODE	1	B0HAGP000001
D3816-18	MA188	DIODE	3	MA2C188

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D3819-21	MA29A	DIODE	3	MA2C0290A
D3823	D1NL40V70	DIODE	1	B0HALP000002
D3824	ERA22-04	DIODE	1	B0HAGP000001
D3831	D1NL40V70	DIODE	1	B0HALP000002
D3833	D1NL40V70	DIODE	1	B0HALP000002
D3844	ERZV07D361	VARISTOR	1	
D3850	MA188	DIODE	1	MA2C188
D4503	MA152	DIODE	1	
D4504	MA152K	DIODE	1	MA3X152K
D4506	MA704	DIODE	1	MA3X704
D4507,08	MA152K	DIODE	2	MA3X152K
D5001-04	B0KB00000023	DIODE	4	
D5005	MA3056M	ZENER DIODE	1	MAZ30560M
D5011	MA3036H	ZENER DIODE	1	MAZ30360H
D5012-14	MA111	DIODE	3	MA2J111
D5101	MA3056M	ZENER DIODE	1	MAZ30560M
D5805,06	MA165	DIODE	2	MA2C165
DG1	TJSF17425	25P CONNECTOR	1	K1KA25B00004
DG2	K1KA40B00075	40P CONNECTOR	1	
DG3	K1KB40A00088	40P CONNECTOR	1	
DG5	TJS3A9920	12P CONNECTOR	1	K1KA12A00156
F801	XBA1C63NU100	FUSE 125V 6.3A	1	K5D632AD0002 ⚠
F801-1,-2	EYF-52BC	FUSE HOLDER	2	
G2,G3	K1KA10A00215	10P CONNECTOR	2	
G6	K1KA05A00139	5P CONNECTOR	1	
G7	TJS3A9640	3P CONNECTOR	1	K1KA03A00171
H1	K1KA40B00075	40P CONNECTOR	1	
IC001	MN102H75KTH	IC	1	
IC002	TVRN018-1	IC	1	C3EBJC000038
IC003	PST9131NR	IC	1	
IC004	C0CBCBD00004	IC	1	
IC005	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC006	CXA1315M	LINEAR IC	1	C1AB00000440
IC433	AN6562S	LINEAR IC	1	
IC434	NJM2903M	INTEGRATED CIRCUIT	1	C0BBBA000019
IC451	LA78045	LINEAR IC	1	C1AA00000521
IC454	TC74HC107AF	IC	1	C0JBAG000032
IC458	AN6562S	LINEAR IC	1	
IC500	LA6510	LINEAR IC	1	C0AABB000107
IC502	AN5751N	IC	1	
IC503	AN6562S	LINEAR IC	1	
IC504	SI-8050S	HYBRID IC	1	C0DAAHH00013
IC506	NJM2903M	INTEGRATED CIRCUIT	1	C0BBBA000019
IC507,08	AN6914S	LINEAR IC	2	
IC651	TC74HC221AF	MOS IC (CMOS S/LOGIC)	1	C0JBAM000065
IC801	AN8029	LINEAR IC	1	⚠
IC802	SE130N	LINEAR IC	1	⚠
IC804	TVSS1WBS20	DIODE	1	B0EBKM000016

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC811	CNC1S171R	IC	1	⚠
IC871	SI-8050S	HYBRID IC	1	C0DAAHH00013
IC872	C0DAAZG00006	IC	1	
IC875	SI-8090S	HYBRID IC	1	C0DAAHH00015
IC877	PQ12RD1B	LINEAR IC	1	C0DAZJG00004
IC2201	AN5849SV	IC	1	
IC2301	C1BA00000362	IC	1	
IC2302	C1BB00000772	IC	1	
IC2304	TC74HC4066AF	MOS IC (CMOS S/LOGIC)	1	C0JBAS000058
IC2305	C0ABBB000190	IC	1	
IC2306	C1BB00000787	IC	1	
IC3801	C1AA00000662	IC	1	
IC4301	CXA2079Q	LINEAR IC	1	C1AB00000460
IC4302	AN15852A	IC	1	
IC4501	C1AB00001702	IC	1	
IC4502	C1AB00001703	IC	1	
IC4503	C0CBCBD00005	IC	1	
IC4504	C3HBKZ000001	IC	1	
IC4505	C0CBCAD00007	IC	1	
IC4506	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC4507,08	C0CBCBD00005	IC	2	
IC4509	C0CBCAD00007	IC	1	
IC4510	TC74HC221AF	MOS IC (CMOS S/LOGIC)	1	C0JBAM000065
IC4511	C0CBCBD00005	IC	1	
IC4512	AN15935A-VF	IC	1	
IC4513	C0CBCAD00007	IC	1	
IC4514	C0CBCBD00005	IC	1	
IC4515	C0FBAF000040	IC	1	
IC4516	C0CBCAD00007	IC	1	
IC4517	C0CBCBD00005	IC	1	
IC4518	C3ABPJ000017	IC	1	
IC4519	C0CBCBD00005	IC	1	
IC5001	C1AB00001864	IC	1	
IC5002	C3EBDC000046	IC	1	
IC5005	C0JBAF000184	IC	1	
IC5006	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC5007	C0JBAB000573	IC	1	
IC5010	TC74HC4066AF	MOS IC (CMOS S/LOGIC)	1	C0JBAS000058
IC5011	C0CBCBD00005	IC	1	
IC5012	C0CBABF00009	IC	1	
IC5102	C1AB00001823	IC	1	
IC5103	C0JBAB000573	IC	1	
IC5104	C0JBAZ001994	IC	1	
IC5105	TC7WT74FU	MOS IC (CMOS S/LOGIC)	1	
IC5106	C0JBAZ001264	IC	1	
IC5803	LA6510	LINEAR IC	1	C0AABB000107
JA1	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA2	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA3	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA4	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA5	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA6	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA7	ERJ6GEY0R00	M 0 OHM, 1/10W	1	

[illegible]	[illegible]	[illegible]	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
JA10	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA12	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA13	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA14	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA15	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JA26	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JK3001	K1U946A00001	CONNECTOR	1	
JK3003	K2HA204A0038	JACK	1	
JK3151	TJBA187	TERMINAL BOARD	1	
JK3804	K3B10CA00043	CRT SOCKET	1	⚠
JK5001	K1FB124B0019	CONNECTOR	1	
JS002	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS005	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS6	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS006	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS7,S8	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
JS27,28	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS32	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS49-53	ERJ3GEYJ0R00	M 0 OHM, 1/16W	5	
JS55-60	ERJ3GEYJ0R00	M 0 OHM, 1/16W	6	
JS62	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS64	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS66	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS68	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS70	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS451	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS458	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS552	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS2406-10	ERJ6GEY0R00	M 0 OHM, 1/10W	5	
JS4301-28	ERJ6GEY0R00	M 0 OHM, 1/10W	28	
JS4501	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4503-08	ERJ6GEY0R00	M 0 OHM, 1/10W	6	
JS4510	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4514	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4516	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4521	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4523-25	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
JS4528	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4530	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4535-40	ERJ6GEY0R00	M 0 OHM, 1/10W	6	
JS4546	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4548-51	ERJ6GEY0R00	M 0 OHM, 1/10W	4	
JS4557-66	ERJ3GEYJ0R00	M 0 OHM, 1/16W	10	
JS5015-24	ERJ6GEY0R00	M 0 OHM, 1/10W	10	
JS5031-33	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
JS5034-36	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
JS5047	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
JS5048	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS5049-55	ERJ3GEYJ0R00	M 0 OHM, 1/16W	7	
JS5064-66	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
JS5067-69	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
K1	TJS3A9880	8P CONNECTOR	1	K1KA08A00179
L1	TJS3A9920	12P CONNECTOR	1	K1KA12A00156
L002	ELESE330JA	PEAKING COIL	1	
L2	K1KA03A00172	3P CONNECTOR	1	
L3	K1KA07A00096	7P CONNECTOR	1	
L004	EXCELSA39	BEAD CHOKE	1	
L007	EXCELSA35	BEAD CHOKE	1	
L009,10	ELESE330JA	PEAKING COIL	2	
L10	TJSF51701	CONNECTOR	1	K1ZZ00001205
L011	ELESE330JA	PEAKING COIL	1	
L11,12	TJSF41601	CONNECTOR	2	K1ZZ00001074
L14	TJSF41601	CONNECTOR	1	K1ZZ00001074
L016,17	EXCELSA35	BEAD CHOKE	2	
L501,02	EXCELSA24	BEAD CHOKE	2	
L503	TALL13N103JB	INDUCTION COIL	1	G0A103B00001
L504	EXCELSA35	BEAD CHOKE	1	
L506	EXCELSA24	BEAD CHOKE	1	
L507	EXCELSA35	BEAD CHOKE	1	
L509	G0A100GA0013	CHOKE COIL	1	
L510	TALL13N103JB	INDUCTION COIL	1	G0A103B00001
L512	TAL10RP681LB	INDUCTION COIL	1	G0ZZ00001915
L514	EXCELSA35	BEAD CHOKE	1	
L515	G0A471CA0008	CHOKE COIL	1	
L516	G0C101K00023	PEAKING COIL	1	
L518	EXCELDR35C	BEAD CHOKE	1	
L531	EXCELSA35	BEAD CHOKE	1	
L552	G0D220000004	INDUCTION COIL	1	
L553	EXCELSA39	BEAD CHOKE	1	
L554	ELH5L8109	LINEARITY COIL	1	
L561	TALFP15B332K	INDUCTION COIL	1	G0A332DA0017
L562	EXCELSA24	BEAD CHOKE	1	
L563	G0A151ZA0004	CHOKE COIL	1	
L564	G0A330G00010	CHOKE COIL	1	
L565	G0A470F00004	CHOKE COIL	1	
L801	G0B650H00002	CHOKE COIL	1	⚠
L802,03	G0B332H00002	CHOKE COIL	2	⚠
L804	G0B102H00009	CHOKE COIL	1	⚠
L807	EXCELDR35C	BEAD CHOKE	1	
L812	EXCELSA35	BEAD CHOKE	1	
L813	EXCELSA39	BEAD CHOKE	1	
L815,16	EXCELSA39	BEAD CHOKE	2	
L819,20	EXCELSA24	BEAD CHOKE	2	
L821	EXCELDR35C	BEAD CHOKE	1	
L824	EXCELDR35C	BEAD CHOKE	1	
L825,26	TLUADTB820K	PEAKING COIL	2	G0A820GA0017
L827	TALL08N470KA	INDUCTION COIL	1	G0A470GA0011
L831	EXCELSA39	BEAD CHOKE	1	
L832	EXCELDR35C	BEAD CHOKE	1	
L833	TLUADTB820K	PEAKING COIL	1	G0A820GA0017
L875	G0A151ZA0004	CHOKE COIL	1	
L876	TALFP15B221K	INDUCTION COIL	1	G0A221GA0001
L878	TALFP15B221K	INDUCTION COIL	1	G0A221GA0001

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L882	G0A470F00004	CHOKE COIL	1	
L885	G0A220GA0002	CHOKE COIL	1	
L886	TALL08N221KA	INDUCTION COIL	1	G0A221DA0010
L887	G0A330G00010	CHOKE COIL	1	
L891,92	G0A101E00003	CHOKE COIL	2	
L901	ELESE100JA	PEAKING COIL	1	
L903,04	EXCELSA35	BEAD CHOKE	2	
L906	ELESE330JA	PEAKING COIL	1	
L2201	ELESE100JA	PEAKING COIL	1	
L2301	G0A330ZA0003	CHOKE COIL	1	G0A330HA0012
L2304	G1C100KA0008	INDUCTOR COIL	1	
L2310	TALFP15B221K	INDUCTION COIL	1	G0A221H00004
L2338	EXCELSA35	BEAD CHOKE	1	
L2339	EXCELSA24	BEAD CHOKE	1	
L3001	EXCELSA35	BEAD CHOKE	1	
L3801-03	ELESN2R2JA	PEAKING COIL	3	G0C2R2JA0021
L3804	EXCELSA24	BEAD CHOKE	1	
L3806,07	EXCELDR35C	BEAD CHOKE	2	
L3812,13	EXCELDR35C	BEAD CHOKE	2	
L3825	EXCELSA24	BEAD CHOKE	1	
L3826	EXCELSA35	BEAD CHOKE	1	
L3830	EXCELSA24	BEAD CHOKE	1	
L4301,02	G1C100KA0008	INDUCTOR COIL	2	
L4501	J0JHC0000031	CHIP INDUCTOR	1	
L4502	TALC168T1R5K	CHIP INDUCTOR COIL	1	G1C1R5K00004
L4503,04	TALC168T5R6K	CHIP INDUCTOR COIL	2	G1C5R6K00007
L4505	TALC168T3R3K	CHIP INDUCTOR COIL	1	G1C3R3K00007
L4506,07	J0JHC0000031	CHIP INDUCTOR	2	
L4508	J0JHC0000078	CHIP INDUCTOR	1	
L4509	J0JHC0000031	CHIP INDUCTOR	1	
L4510	J0JHC0000078	CHIP INDUCTOR	1	
L4511-14	J0JCC0000241	CHIP INDUCTOR	4	
L4515	J0JHC0000078	CHIP INDUCTOR	1	
L4516-18	J0JCC0000241	CHIP INDUCTOR	3	
L4519	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
L4520,21	TALC168T5R6K	CHIP INDUCTOR COIL	2	G1C5R6K00007
L4522	TALC168T4R7K	CHIP INDUCTOR COIL	1	G1C4R7K00013
L4523	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
L4524	J0JHC0000078	CHIP INDUCTOR	1	
L4525	J0JHC0000031	CHIP INDUCTOR	1	
L4526,27	J0JCC0000241	CHIP INDUCTOR	2	
L4528,29	J0JHC0000078	CHIP INDUCTOR	2	
L4530,31	J0JCC0000241	CHIP INDUCTOR	2	
L4532	J0JHC0000078	CHIP INDUCTOR	1	
L4533	J0JHC0000031	CHIP INDUCTOR	1	
L4534	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
L4540	J0JHC0000078	CHIP INDUCTOR	1	
L4541	J0JBC0000080	CHIP INDUCTOR	1	
L5002-04	J0JBC0000080	CHIP INDUCTOR	3	
L5006-09	J0JBC0000080	CHIP INDUCTOR	4	
L5013	J0JDC0000052	CHIP INDUCTOR	1	
L5015	J0JBC0000080	CHIP INDUCTOR	1	
L5016	J0JDC0000052	CHIP INDUCTOR	1	
L5017,18	J0JBC0000080	CHIP INDUCTOR	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L5101,02	J0JDC0000052	CHIP INDUCTOR	2	
L5104,05	J0JHC0000031	CHIP INDUCTOR	2	
LC001	EXCEMT103DT	EMI FILTER	1	
LC4509	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4511,12	TLK212T256AL	EMI FILTER	2	J0HAAB000012
LC4513	J0HAAB000031	LC FILTER	1	
LC4515	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4517	TLK20LFA473M	EMI FILTER	1	J0HABB000018
LC4518	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4519,20	TLK20LFA473M	EMI FILTER	2	J0HABB000018
LC4522	TLK20LFA473M	EMI FILTER	1	J0HABB000018
LC4526,27	TLK212T256AL	EMI FILTER	2	J0HAAB000012
LC4529	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4531	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4541-45	ELKE471FA	NOISE FILTER	5	
LC4547	ELKE471FA	NOISE FILTER	1	
LC4552	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4556	J0HABB000004	LC FILTER	1	
LC4557-59	TLK20LFA103M	EMI FILTER	3	J0HABB000009
LC5001-03	TLK20LFA473M	EMI FILTER	3	J0HABB000018
LC5004-06	J0HABB000004	LC FILTER	3	
LC5008	TLK20LFA473M	EMI FILTER	1	J0HABB000018
LC5009	ELKE221FA	NOISE FILTER	1	
LC5010,11	TLK20LFA473M	EMI FILTER	2	J0HABB000018
LC5012,13	ELKE221FA	NOISE FILTER	2	
LG1-10	K4ZZ01000179	TERMINAL	10	
LG12-17	K4ZZ01000179	TERMINAL	6	
P1	TJS3A9630	CONNECTOR	1	K1KA03A00183
P11	TJS3A9140	CONNECTOR	1	K1KA08B00121
P12	TJS3A9150	CONNECTOR	1	K1KA08B00122
P14	TJS3A9150	CONNECTOR	1	K1KA08B00122
P15	K1KA07A00096	7P CONNECTOR	1	
Q002	2SD601A	TRANSISTOR	1	2SD0601A
Q003	2SB0709A	TRANSISTOR	1	
Q005	2SD601A	TRANSISTOR	1	2SD0601A
Q009-13	2SD601A	TRANSISTOR	5	2SD0601A
Q017	2SD601A	TRANSISTOR	1	2SD0601A
Q404	2SD601A	TRANSISTOR	1	2SD0601A
Q405	2SA1309A	TRANSISTOR	1	2SA13090WA
Q406	2SD601A	TRANSISTOR	1	2SD0601A
Q408	2SD601A	TRANSISTOR	1	2SD0601A
Q410,11	2SD601A	TRANSISTOR	2	2SD0601A
Q412	2SB0709A	TRANSISTOR	1	
Q454	2SD601A	TRANSISTOR	1	2SD0601A
Q455,56	2SB709A	TRANSISTOR	2	2SB0709A
Q457,58	2SD601A	TRANSISTOR	2	2SD0601A
Q459	2SC1473	TRANSISTOR	1	2SC14730E
Q501	2SK2962	FET	1	
Q504	2SD601A	TRANSISTOR	1	2SD0601A
Q505	2SB0709A	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q511	2SD601A	TRANSISTOR	1	2SD0601A
Q512	2SB0709A	TRANSISTOR	1	
Q513	2SD601A	TRANSISTOR	1	2SD0601A
Q551	2SC5686000LK	TRANSISTOR	1	
Q552	B1DEGU000003	TRANSISTOR	1	
Q553	2SC3940A	TRANSISTOR	1	2SC3940AR
Q556	B1DEGU000003	TRANSISTOR	1	
Q561	B1DEDQ000011	FET	1	
Q562	2SK2538000LB	FET	1	
Q563	2SC5460	TRANSISTOR	1	
Q564,65	2SC3311A	TRANSISTOR	2	2SC3311AW
Q566	2SD601A	TRANSISTOR	1	2SD0601A
Q567	B1DGDN000001	FET	1	
Q568	2SD601A	TRANSISTOR	1	2SD0601A
Q651	2SC3311A	TRANSISTOR	1	2SC3311AW
Q654,55	2SD601A	TRANSISTOR	2	2SD0601A
Q701	B1DEGG000010	FET	1	
Q702,03	2SD601A	TRANSISTOR	2	2SD0601A
Q704	2SB0709A	TRANSISTOR	1	
Q705	2SD601A	TRANSISTOR	1	2SD0601A
Q706	2SB0709A	TRANSISTOR	1	
Q707,08	2SD601A	TRANSISTOR	2	2SD0601A
Q801	2SK2917	FET	1	B1DEGQ000003 ⚠
Q802,03	2SC3311A	TRANSISTOR	2	2SC3311AW
Q804	2SA1309A	TRANSISTOR	1	2SA13090WA
Q805,06	2SC3311A	TRANSISTOR	2	2SC3311AW
Q808	2SC3311A	TRANSISTOR	1	2SC3311AW
Q854	2SB1011	TRANSISTOR	1	
Q860,61	2SD601A	TRANSISTOR	2	2SD0601A
Q863	2SD601A	TRANSISTOR	1	2SD0601A
Q870	2SB709A	TRANSISTOR	1	2SB0709A
Q871	2SD601A	TRANSISTOR	1	2SD0601A
Q880	2SB0709A	TRANSISTOR	1	
Q900,01	2SD601A	TRANSISTOR	2	2SD0601A
Q903	2SD601A	TRANSISTOR	1	2SD0601A
Q904	2SB0709A	TRANSISTOR	1	
Q905	2SD601A	TRANSISTOR	1	2SD0601A
Q906	2SD592A	TRANSISTOR	1	2SD0592AW
Q907	2SB621A	TRANSISTOR	1	2SB0621AW
Q908	2SB1569A	TRANSISTOR	1	
Q909	2SD2400A	TRANSISTOR	1	
Q910	2SB0709A	TRANSISTOR	1	
Q911	2SD601A	TRANSISTOR	1	2SD0601A
Q912	2SC3311A	TRANSISTOR	1	2SC3311AW
Q913	2SA1309A	TRANSISTOR	1	2SA13090WA
Q2301,02	2SD601A	TRANSISTOR	2	2SD0601A
Q2303	2SB0709A	TRANSISTOR	1	
Q2304,05	2SD601A	TRANSISTOR	2	2SD0601A
Q2306	B1BAEF000004	TRANSISTOR	1	
Q2307	2SB0709A	TRANSISTOR	1	
Q2308	2SD601A	TRANSISTOR	1	2SD0601A
Q2310,11	2SB0709A	TRANSISTOR	2	
Q2312	2SD601A	TRANSISTOR	1	2SD0601A
Q2316-18	2SD601A	TRANSISTOR	3	2SD0601A

[illegible]	[illegible]	TRANSISTOR	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q2320-23	2SD601A	TRANSISTOR	4	2SD0601A
Q2505	2SD601A	TRANSISTOR	1	2SD0601A
Q3801-03	2SA1767Q	TRANSISTOR	3	2SA17670Q
Q3804-06	2SC58630QL	TRANSISTOR	3	
Q3807	2SD2400A	TRANSISTOR	1	
Q3808	2SC2258	TRANSISTOR	1	
Q3809-11	2SB0709A	TRANSISTOR	3	
Q3812-14	2SD601A	TRANSISTOR	3	2SD0601A
Q4301,02	2SD601A	TRANSISTOR	2	2SD0601A
Q4303	2SB0709A	TRANSISTOR	1	
Q4501-03	2SD601A	TRANSISTOR	3	2SD0601A
Q4504-06	2SB0709A	TRANSISTOR	3	
Q4507	2SD601A	TRANSISTOR	1	2SD0601A
Q4508	2SB0709A	TRANSISTOR	1	
Q4509	2SB709A	TRANSISTOR	1	2SB0709A
Q4510	2SD601A	TRANSISTOR	1	2SD0601A
Q4511-13	2SD1030	TRANSISTOR	3	
Q4514	2SB0709A	TRANSISTOR	1	
Q4517	2SB0709A	TRANSISTOR	1	
Q4518,19	2SD601A	TRANSISTOR	2	2SD0601A
Q4520	2SB0709A	TRANSISTOR	1	
Q4522-24	2SD601A	TRANSISTOR	3	2SD0601A
Q4526,27	2SB0709A	TRANSISTOR	2	
Q4529	2SB0709A	TRANSISTOR	1	
Q4530	2SD1030	TRANSISTOR	1	
Q4531	2SB0709A	TRANSISTOR	1	
Q4532,33	2SD1030	TRANSISTOR	2	
Q4534-37	XN5601	TRANSISTOR	4	XN05601
Q4538-40	2SD601A	TRANSISTOR	3	2SD0601A
Q4541	XN1501TX	TRANSISTOR	1	XN0150100L
Q5001-06	2SB0709A	TRANSISTOR	6	
Q5007	B1MBACA00004	TRANSISTOR	1	
Q5101-03	2SD601A	TRANSISTOR	3	2SD0601A
Q5104,05	2SB0709A	TRANSISTOR	2	
R001	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R002	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R003	ERD25V0R00	C 0 OHM, 1/4W	1	
R005,06	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R008	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R009,10	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R011-14	ERJ6GEYJ102	M 1KOHM,J,1/10W	4	
R017	ERJ6GEYJ151	M 150 OHM,J,1/10W	1	
R018	ERDS2TJ221	C 220 OHM, J,1/4W	1	
R019	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R020	ERJ6ENF82R0	M 82 OHM, 1/10W	1	
R022	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R023,24	ERJ6ENF82R0	M 82 OHM, 1/10W	2	
R025	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R026	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R027	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R028	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R029	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R030	ERJ6ENF9100	M 910 OHM, 1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R031	ERJ6ENF5100	M 510 OHM, 1/10W	1	
R032	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R033	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R034	ERJ6ENF6800	M 680 OHM, 1/10W	1	
R035	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R036	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R037	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R038	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R039	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	1	
R040	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R041	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R042	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R044	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R045	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R047,48	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R051	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R052,53	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R055-64	ERJ6GEYJ102	M 1KOHM,J,1/10W	10	
R065	ERJ6ENF4702	M 47KOHM, 1/10W	1	
R066	ERJ6ENF5602	M 56KOHM, 1/10W	1	
R067-70	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R071	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R076,77	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R080	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R082	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	1	
R086,87	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R088	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R089	ERJ6GEYJ241	M 240 OHM,J,1/10W	1	
R090	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R091	ERJ6GEYJ241	M 240 OHM,J,1/10W	1	
R092,93	ERJ6GEYJ123	M 12KOHM,J,1/10W	2	
R094,95	ERJ6GEYJ221	M 220 OHM,J,1/10W	2	
R096	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R097	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R098,99	ERJ6GEYJ220	M 22 OHM,J,1/10W	2	
R100	ERJ6GEYJ242	M 2.4KOHM,J,1/10W	1	
R101	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R102	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R103	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	1	
R104	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R105	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R106-09	ERJ6GEYJ101	M 100 OHM,J,1/10W	4	
R115	ERJ6GEYJ220	M 22 OHM,J,1/10W	1	
R119	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R120	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R121	ERDS2TJ220	C 22 OHM, J,1/4W	1	
R122	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R123	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R124,25	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R126-28	ERJ6ENF1001	M 1KOHM, 1/10W	3	
R141	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R407	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R408	ERDS2TJ272	C 2.7KOHM, J,1/4W	1	
R409	ERJ6GEYJ563	M 56KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R410	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R411	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R412	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R413	ERDS2TJ104	C 100KOHM, J,1/4W	1	
R414	ERX1SJR82P	M0.82 OHM, J, 1W	1	
R415	ERG3FJS331D	M 330 OHM, J, 3W	1	
R416	ERDS2TC0	C 0 OHM, 1/4W	1	
R417	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R418	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R419	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R420	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R421	ERJ6ENF1602	M 16KOHM, 1/10W	1	
R422	ERJ6ENF2001	M 2KOHM, 1/10W	1	
R423	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R424	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R425	ERDS1FJ1R0	C 1 OHM, J,1/2W	1	⚠
R426	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R427	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R428	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R429	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R430	ER0S2CKF1500	M 150 OHM, F,1/4W	1	
R431	ER0S2CKF2000	M 200 OHM, F,1/4W	1	
R434,35	ERX12SJ3R3	M 3.3 OHM, J,1/2W	2	
R441	ERX1SJ1R0	M 1.0 OHM, J, 1W	1	
R444	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R445	ERX1SJ1R0	M 1.0 OHM, J, 1W	1	
R447	ERJ6ENF6800	M 680 OHM, 1/10W	1	
R449	ERJ6ENF3901	M 3.9KOHM, 1/10W	1	
R457	ERJ6ENF9761	M9.76KOHM, 1/10W	1	
R460	ERJ6GEYJ183	M 18KOHM,J,1/10W	1	
R463	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R464	ERJ6GEYF103	M 10KOHM,F,1/10W	1	
R465	ERJ6ENF2201	M 2.2KOHM, 1/10W	1	
R470	ERJ6GEYJ683	M 68KOHM,J,1/10W	1	
R471	ERJ6ENF1503	M 150KOHM, 1/10W	1	
R472	ERJ6ENF2702	M 27KOHM, 1/10W	1	
R473	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	1	
R474	ERJ6GEYJ124	M 120KOHM,J,1/10W	1	
R475	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R476	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R477	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R478	ERJ6ENF4702	M 47KOHM, 1/10W	1	
R479	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R480	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R481	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R482	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R483	ERJ6GEYJ331	M 330 OHM,J,1/10W	1	
R484	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R495	ERJ6ENF2203	M 220KOHM, 1/10W	1	
R500	ERD25FJ1R0	C 1 OHM, J,1/4W	1	
R501	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R502	ERG3FJS391D	M 390 OHM, J, 3W	1	
R503	ERG3FJS221D	M 220 OHM, J, 3W	1	
R504	ERDS2TJ680	C 68 OHM, J,1/4W	1	

[illegible]	[illegible]	[illegible]	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R505	ERG1FJS102D	M 1KOHM, J, 1W	1	
R506	ERG2FJS221D	M 220 OHM, J, 2W	1	
R507	ERX2FJSR22D	M0.22 OHM, J, 2W	1	
R508	ERDS2TJ221	C 220 OHM, J,1/4W	1	
R509	ERDS1FJ1R0	C 1 OHM, J,1/2W	1	
R510	ERG3FJS561D	M 560 OHM, J, 3W	1	
R511	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R512	ERDS2TJ102	C 1KOHM, J,1/4W	1	
R513	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R514,15	ER0S2CKF2322	M23.2KOHM, F,1/4W	2	
R516	ERDS2TJ101	C 100 OHM, J,1/4W	1	
R517,18	ERDS2TJ103	C 10KOHM, J,1/4W	2	
R519	ERDS2TJ101	C 100 OHM, J,1/4W	1	
R520	ER0S2CKF2102	M 21KOHM, F,1/4W	1	
R521	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R522	ERJ6GEYJ330	M 33 OHM,J,1/10W	1	
R523	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R524	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R525	ERDS1FJ182	C 1.8KOHM, J,1/2W	1	
R526	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R527	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R528,29	ERDS2TJ473	C 47KOHM, J,1/4W	2	
R530	ERDS2TJ123	C 12KOHM, J,1/4W	1	
R531	ERDS2TJ221	C 220 OHM, J,1/4W	1	
R532	ERD25FJ1R0	C 1 OHM, J,1/4W	1	
R534	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R535	ERDS2TJ472	C 4.7KOHM, J,1/4W	1	
R536	ERJ6ENF1302	M 13KOHM, 1/10W	1	
R537	ER0S2CKF5600	M 560 OHM, F,1/4W	1	
R538	ER0S2CKF1100	M 110 OHM, F,1/4W	1	
R539	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R540	ERC14GK334	S 330KOHM, K,1/4W	1	
R541	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R542,43	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R544	ERG2FJS223D	M 22KOHM, J, 2W	1	
R545	ERDS2TJ471	C 470 OHM, J,1/4W	1	
R547	ERG1FJS332D	M 3.3KOHM, J, 1W	1	
R548,49	ERG5FJ152H	M 1.5KOHM, J, 5W	2	
R550	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R551	ERC14GK184	S 180KOHM, 1/4W	1	
R552	ERC14GK224	S 220KOHM, 1/4W	1	
R554	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R556	ERDS2TJ6R8	C 6.8 OHM, J,1/4W	1	
R558	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R559	ERC12GK104	S 100KOHM, K,1/2W	1	
R560	ERC14GK225	S 2.2MOHM, 1/4W	1	
R561	ER0S2CKF2102	M 21KOHM, F,1/4W	1	
R562	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R563	ERG3FJS123D	M 12KOHM, J, 3W	1	
R564	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R565	ERJ6GEYJ560	M 56 OHM,J,1/10W	1	
R566	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R569	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R570	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R573	ERC14GK101	S100 OHM, G,1/4W	1	
R579	ERDS2TJ392	C 3.9KOHM, J,1/4W	1	
R580	ERQ14AJ6R8	F 6.8 OHM, J,1/4W	1	
R582	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R583	ERJ6ENF5761	M5.76KOHM, 1/10W	1	
R584	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R585	ERJ6ENF3651	M3.65KOHM, 1/10W	1	
R586	ERJ6ENF1693	M 169KOHM, 1/10W	1	
R587	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R588	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R589	ERX12ZJR15	M0.15 OHM, J,1/2W	1	ERX12SZJR15
R590	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R591	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R592	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R593	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R595	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R597	ERF5AJ330	W 33 OHM, 5W	1	
R598	ERX12ZJR15	M0.15 OHM, J,1/2W	1	ERX12SZJR15
R599	ERDS2TJ472	C 4.7KOHM, J,1/4W	1	
R601	ERJ6GEYJ331	M 330 OHM,J,1/10W	1	
R651	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R652	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R653	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R654	ERJ6ENF4121	M4.12KOHM, 1/10W	1	
R655	ERDS2TJ681	C 680 OHM, J,1/4W	1	
R656	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R661	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R662	ERJ6GEYJ183	M 18KOHM,J,1/10W	1	
R663	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R664	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	1	
R665	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R670	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R671	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R672	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R673	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R674	ERJ6ENF2201	M 2.2KOHM, 1/10W	1	
R676	ERJ6GEYJ681	M 680 OHM,J,1/10W	1	
R701	ERQ14AJ220P	F 22 OHM, J,1/4W	1	
R702	ERDS2TJ473	C 47KOHM, J,1/4W	1	
R703	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R704	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R705	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R711	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R714	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R716	ERJ6ENF8203	M 820KOHM, 1/10W	1	
R721	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R722	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R723	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R724	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R726	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R728	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R733	ER0S2CKF1373	M 137KOHM, F,1/4W	1	
R734	ER0S2CKF1542	M15.4KOHM, F,1/4W	1	EROS2CKF1542
R737	ERDS1FJ220	C 22 OHM, J,1/2W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R740	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R741	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R742	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R743	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R744	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R745	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R754	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R759,60	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R761	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R762	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R763,64	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R765	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R784	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R785,86	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R787	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R788	ERDS2TJ103	C 10KOHM, J,1/4W	1	
R795	ERDS2TJ272	C 2.7KOHM, J,1/4W	1	
R800	ERU5TCK1R5T	F 1.5 OHM, 5W	1	⚠
R801	ERC14GK824	S 820KOHM, 1/4W	1	
R803	ERDS2TJ680	C 68 OHM, J,1/4W	1	
R804	ERDS2TJ331	C 330 OHM, J,1/4W	1	
R806	ERDS2TJ473	C 47KOHM, J,1/4W	1	
R807	ERDS2TJ820	C 82 OHM, J,1/4W	1	
R808	ERDS2TJ680	C 68 OHM, J,1/4W	1	
R809	ERDS2TJ472	C 4.7KOHM, J,1/4W	1	
R810	ERDS2TJ473	C 47KOHM, J,1/4W	1	
R811	ERDS2TJ472	C 4.7KOHM, J,1/4W	1	
R812	ERDS2TJ473	C 47KOHM, J,1/4W	1	
R813	ERDS1FJ152	C 1.5KOHM, J,1/2W	1	
R814	ERG3FJ223	M 22KOHM, J, 3W	1	
R815	ERDS2TJ331	C 330 OHM, J,1/4W	1	
R816	ERDS2TJ471	C 470 OHM, J,1/4W	1	
R817	ER0S2CKF1371	M1.37KOHM, F,1/4W	1	
R818	ERDS2TJ220	C 22 OHM, J,1/4W	1	
R819	ERDS1FJ390	C 39 OHM, J,1/2W	1	
R820	ERDS1FJ120	C 12 OHM, J,1/2W	1	
R821,22	ERX12SJ1R8	M 1.8 OHM, J,1/2W	2	
R823	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R824	ERDS2TJ153	C 15KOHM, J,1/4W	1	
R825	ERDS2TJ104	C 100KOHM, J,1/4W	1	
R826	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R828	ERDS2TJ103	C 10KOHM, J,1/4W	1	
R829	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R830	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R831	ERDS2TJ332	C 3.3KOHM, J,1/4W	1	
R832	ERD75TAJ825	C 8.2MOHM, J,3/4W	1	⚠
R833,34	ERDS2TJ104	C 100KOHM, J,1/4W	2	
R835	ERDS2TJ101	C 100 OHM, J,1/4W	1	
R836	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R837	ERDS2TJ222	C 2.2KOHM, J,1/4W	1	
R838	ERDS1FJ330	C 33 OHM, J,1/2W	1	
R839	ERDS2TJ222	C 2.2KOHM, J,1/4W	1	
R840	ERDS2TJ470	C 47 OHM, J,1/4W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R841	ERDS2TJ104	C 100KOHM, J,1/4W	1	
R842	ERDS2TJ223	C 22KOHM, J,1/4W	1	
R843	ERDS2TJ681	C 680 OHM, J,1/4W	1	
R844	ERDS2TJ104	C 100KOHM, J,1/4W	1	
R845	ERDS2TJ332	C 3.3KOHM, J,1/4W	1	
R846	ERDS2TJ473	C 47KOHM, J,1/4W	1	
R847	ERDS2TJ392	C 3.9KOHM, J,1/4W	1	
R852	ERDS1FJ273	C 27KOHM, J,1/2W	1	
R853	ERDS1FJ562	C 5.6KOHM, J,1/2W	1	
R854	ERDS2TJ102	C 1KOHM, J,1/4W	1	
R855	ERDS2TJ913	C 91KOHM, J,1/4W	1	
R856	ERDS2TJ123	C 12KOHM, J,1/4W	1	
R857,58	ERX1SJ1R2	M 1.2 OHM, J, 1W	2	
R859	ERDS2TJ272	C 2.7KOHM, J,1/4W	1	
R860	ERG1SJ102P	M 1KOHM, J, 1W	1	
R861-63	ERX12SJR22P	M0.22 OHM, J,1/2W	3	
R865	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R867	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R868	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R869	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R870	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R872	ERQ12HKR22	F0.22 OHM, K,1/2W	1	
R877	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R878	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R880	ERG1FJS222D	M 2.2KOHM, J, 1W	1	
R881	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R882	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R883	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R884	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R888	ERJ6ENF1801	M 1.8KOHM, 1/10W	1	
R889	ERJ6ENF1581	M1.58KOHM, 1/10W	1	
R890	ERJ6ENF30R0	M 30 OHM, 1/10W	1	
R891	ERJ6ENF5600	M 560 OHM, 1/10W	1	
R894	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R895	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R896	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R897	ER0S2CKF1203	M 120KOHM, F,1/4W	1	
R898	ER0S2CKF1002	M 10KOHM, F,1/4W	1	
R900,01	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R902	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R903	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R904	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R905	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R906	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R907	ERJ6GEYJ681	M 680 OHM,J,1/10W	1	
R908	ERJ6GEYJ151	M 150 OHM,J,1/10W	1	
R912	ERDS2TJ681	C 680 OHM, J,1/4W	1	
R913,14	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R915,16	ERDS2TJ221	C 220 OHM, J,1/4W	2	
R917	ERQ14AJ100	F 10 OHM, J,1/4W	1	
R923	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R924	ERDS2TJ561	C 560 OHM, J,1/4W	1	
R925,26	ERDS2TJ683	C 68KOHM, J,1/4W	2	
R927	ERDS2TJ561	C 560 OHM, J,1/4W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R928	ERQ12AJ151P	F 150 OHM, J,1/2W	1	
R929	ERQ14AJ2R2P	F 2.2 OHM, J,1/4W	1	
R930	ERDS2TJ820	C 82 OHM, J,1/4W	1	
R931	ERQ14AJ2R2P	F 2.2 OHM, J,1/4W	1	
R932,33	ERQ14AJ3R3P	F 3.3 OHM, J,1/4W	2	
R934	ERQ1CJ331	F 330 OHM, J, 1W	1	
R935	ERG2FJS391D	M 390 OHM, J, 2W	1	
R937	ERJ6GEYJ121	M 120 OHM,J,1/10W	1	
R938	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R940,41	ERDS2TJ102	C 1KOHM, J,1/4W	2	
R942	ERG2FJS391D	M 390 OHM, J, 2W	1	
R1051	ER0S2CKF1002	M 10KOHM, F,1/4W	1	
R1052,53	ERDS2TJ222	C 2.2KOHM, J,1/4W	2	
R1054	ERDS2TJ332	C 3.3KOHM, J,1/4W	1	
R1055	ERDS2TJ512	C 5.1KOHM, J,1/4W	1	
R1056	ERDS2TJ912	C 9.1KOHM, J,1/4W	1	
R1057	ERDS2TJ223	C 22KOHM, J,1/4W	1	
R1058	ERDS2TJ103	C 10KOHM, J,1/4W	1	
R1060	ERDS2TJ470	C 47 OHM, J,1/4W	1	
R1061	ERDS2TJ101	C 100 OHM, J,1/4W	1	
R1062	ERDS2TJ182	C 1.8KOHM, J,1/4W	1	
R2203	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R2206,07	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R2208,09	ERD25V0R00	C 0 OHM, 1/4W	2	
R2220	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2221	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R2301	ERJ6ENF1100	M 110 OHM, 1/10W	1	
R2302	ERJ6ENF1202	M 12KOHM, 1/10W	1	
R2303	ERJ6ENF1100	M 110 OHM, 1/10W	1	
R2304	ERJ6ENF1202	M 12KOHM, 1/10W	1	
R2305-08	ERDS2TJ2R2	C 2.2 OHM, J,1/4W	4	
R2309	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R2310	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2311	ERDS1TJ2R2	C 2.2 OHM, J,1/2W	1	
R2312,13	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R2316	ERJ6GEYJ681	M 680 OHM,J,1/10W	1	
R2317	ERJ6ENF3300	M 330 OHM, 1/10W	1	
R2318	ERJ6GEYJ681	M 680 OHM,J,1/10W	1	
R2319	ERJ6ENF3300	M 330 OHM, 1/10W	1	
R2320	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2322,23	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R2324	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2325	ERDS2TJ333	C 33KOHM, J,1/4W	1	
R2326	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2328	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2329	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2331	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2332	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R2333	ERJ6GEYJ183	M 18KOHM,J,1/10W	1	
R2334	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2335	ERJ6GEYJ271	M 270 OHM,J,1/10W	1	
R2336	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R2351,52	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R2353	ERJ6GEYJ183	M 18KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2354	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2355,56	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R2357	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R2358	ERJ6GEYJ183	M 18KOHM,J,1/10W	1	
R2359	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2360	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2361	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2362	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2363-65	ERJ6GEYJ102	M 1KOHM,J,1/10W	3	
R2366	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2367	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2368,69	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R2370,71	ERJ6GEYJ4R7	M 4.7 OHM,J,1/10W	2	
R2372	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2373	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R2374	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2376	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2378	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R2379	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2380	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2381	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R2382	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2391	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2393,94	ERJ6ENF1500	M 150 OHM, 1/10W	2	
R2397,98	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R2513	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2515,16	ERJ6GEYJ473	M 47KOHM,J,1/10W	2	
R2517	ERJ6ENF3902	M 39KOHM, 1/10W	1	
R2518	ERJ6ENF3012	M30.1KOHM, 1/10W	1	
R2521	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R2524	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R2537	ERJ6ENF9101	M 9.1KOHM, 1/10W	1	
R2538	ERJ6ENF3001	M 3KOHM, 1/10W	1	
R2542	ERJ6ENF3000	M 300 OHM, 1/10W	1	
R2559	ERJ6ENF8201	M 8.2KOHM, 1/10W	1	
R3001,02	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3003,04	ERJ6ENF75R0	M 75 OHM, 1/10W	2	
R3005	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R3006	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3007	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R3008-13	ERJ6ENF75R0	M 75 OHM, 1/10W	6	
R3014	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R3015,16	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3017-19	ERJ6ENF75R0	M 75 OHM, 1/10W	3	
R3020	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R3021,22	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3023	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3024	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R3026-28	ERJ6GEYJ184	M 180KOHM,J,1/10W	3	
R3152	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3154	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3801-03	ERJ6GEYJ560	M 56 OHM,J,1/10W	3	
R3804	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R3805	ERDS2TJ471	C 470 OHM, J,1/4W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3806	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3807	ER0S2CKF3013	M 301KOHM, F,1/4W	1	
R3808	ERJ6ENF1402	M 14KOHM, 1/10W	1	
R3809	ERJ6GEYJ330	M 33 OHM,J,1/10W	1	
R3810	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3811	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R3812	ERJ6GEYJ330	M 33 OHM,J,1/10W	1	
R3813	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3814	ER0S2CKF3013	M 301KOHM, F,1/4W	1	
R3815	ERJ6ENF1402	M 14KOHM, 1/10W	1	
R3816	ERJ6GEYJ330	M 33 OHM,J,1/10W	1	
R3817	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3818	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3819	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3820	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3821	ERDS2TJ104	C 100KOHM, J,1/4W	1	
R3822	ER0S2CKF3013	M 301KOHM, F,1/4W	1	
R3823	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3824-26	ERC12GK101	S 100 OHM, K,1/2W	3	
R3827	ERJ6ENF1402	M 14KOHM, 1/10W	1	
R3828	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R3829	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3830	ERG1FJS682D	M 6.8KOHM, J,1/4W	1	
R3831	ERG2FJS333D	M 33KOHM, J, 2W	1	
R3832-34	ERDS2TJ151	C 150 OHM, J,1/4W	3	
R3836	ERG2FJS101D	M 100 OHM, J, 2W	1	
R3843	ERDS2TJ224	C 220KOHM, J,1/4W	1	
R3844	ER0S2CKF8871	M8.87KOHM, F,1/4W	1	
R3845-47	ERJ6ENF33R0	M 33 OHM, 1/10W	3	
R3848-50	ERJ6ENF2200	M 220 OHM, 1/10W	3	
R3851-53	ERJ6GEYJ391	M 390 OHM,J,1/10W	3	
R3854-56	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R3857	ERG2FJS393D	M 39K OHM, J, 2W	1	
R4305-15	ERJ3GEYJ221	M 220 OHM,J,1/16W	11	
R4316	ERJ3GEYJ820	M 82 OHM,J,1/16W	1	
R4317	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4318	ERJ3GEYJ820	M 82 OHM,J,1/16W	1	
R4319-27	ERJ3GEYJ221	M 220 OHM,J,1/16W	9	
R4328,29	ERJ6ENF75R0	M 75 OHM, 1/10W	2	
R4330-32	ERJ3GEYJ820	M 82 OHM,J,1/16W	3	
R4333-36	ERJ3GEYJ221	M 220 OHM,J,1/16W	4	
R4340,41	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4342,43	ERJ3EKF1501	M 1.5KOHM, 1/16W	2	
R4344-46	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4349,50	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4351	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4353	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4354	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4355	ERJ3EKF1501	M 1.5KOHM, 1/16W	1	
R4356	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4357	ERJ3EKF1501	M 1.5KOHM, 1/16W	1	
R4358	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4359,60	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4361,62	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4364	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4365	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4367	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4368	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4369	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4370	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4371,72	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R4373-75	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
R4376,77	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R4378,79	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4380	ERJ6ENF68R0	M 68 OHM, 1/10W	1	
R4381-83	ERJ6GEYJ681	M 680 OHM,J,1/10W	3	
R4384	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4386-89	ERJ3EKF1501	M 1.5KOHM, 1/16W	4	
R4390	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4393	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4396	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R4501-03	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4504	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4505	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4506	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4507	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4508	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4509	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4510	ERJ3EKF2400	M 240 OHM, 1/16W	1	
R4511,12	ERJ3EKF2200	M 220 OHM, 1/16W	2	
R4513,14	ERJ3EKF3300	M 330 OHM, 1/16W	2	
R4515,16	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R4517,18	ERJ3EKF2401	M 2.4KOHM, 1/16W	2	
R4519,20	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R4521	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R4522	ERJ3EKF7500	M 750 OHM, 1/16W	1	
R4523	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4524-26	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
R4527	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R4529	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4530	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4531,32	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R4534	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4535	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4536	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4537,38	ERJ6GEYJ471	M 470 OHM,J,1/10W	2	
R4539	ERJ3EKF3301	M 3.3KOHM, 1/16W	1	
R4540	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4541	ERJ3EKF2401	M 2.4KOHM, 1/16W	1	
R4542	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4543	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4544-46	EXB38VR000	RESISTOR ARRAY	3	
R4547	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4548,49	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R4550	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4551	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4552	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R4553	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4554-56	ERJ3EKF33R0	M 33 OHM, 1/16W	3	
R4557,58	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R4559-61	ERJ3EKF33R0	M 33 OHM, 1/16W	3	
R4562-64	ERJ3EKF1500	M 150 OHM, 1/16W	3	
R4565,66	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R4567	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4571	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R4572	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R4574	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R4575,76	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4577	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4579,80	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R4581,82	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R4583	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R4584	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4586	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	1	
R4587	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4589	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4590	ERJ3EKF6341	M6.34KOHM, 1/16W	1	
R4591-94	ERJ3EKF2701	M 2.7KOHM, 1/16W	4	
R4595	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4596	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R4597-00	ERJ3EKF75R0	M 0.75HM, 1/16W	4	
R4601	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4602	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4603	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4604	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4605	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4606	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4607	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R4608	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4609	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R4610	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4611	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4612,13	ERJ3EKF1001	M 1KOHM, 1/16W	2	
R4614,15	ERJ3EKF1401	M 1.4KOHM, 1/16W	2	
R4616-18	ERJ3GEYJ100	M 10 OHM,J,1/16W	3	
R4619	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4620	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R4621	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4622,23	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4624	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4625	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4626	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4627	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R4628	ERJ3GEYJ202	M 2KOHM,J,1/16W	1	
R4629	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4630	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R4632	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4633	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R4634	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4635	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4637	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R4638-40	ERJ3EKF1002	M 10KOHM, 1/16W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4641	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4648	ERJ3EKF3302	M 33KOHM, 1/16W	1	
R4649	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R4650,51	ERJ3EKF3302	M 33KOHM, 1/16W	2	
R4652	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4653-55	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4656	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4657	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4658	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4659	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4660	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4661	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4662,63	ERJ3EKF2200	M 220 OHM, 1/16W	2	
R4664	ERJ3EKF2400	M 240 OHM, 1/16W	1	
R4667,68	ERJ3EKF3300	M 330 OHM, 1/16W	2	
R4669	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4670	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R4673	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4674,75	ERJ3EKF2401	M 2.4KOHM, 1/16W	2	
R4677,78	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R4679	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R4680	ERJ3EKF7500	M 750 OHM, 1/16W	1	
R4681	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4682	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4683	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4685	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4686	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4687	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4688	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4689	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4690	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4692	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4693	ERJ6GEYJ331	M 330 OHM,J,1/10W	1	
R4694	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4695	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4696-99	ERJ3GEYJ0R00	M 0 OHM, 1/16W	4	
R4700	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4701	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4702	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4703	ERJ3EKF33R0	M 33 OHM, 1/16W	1	
R4704	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4705	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R4706-10	ERJ3EKF33R0	M 33 OHM, 1/16W	5	
R4711	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4712-14	ERJ3EKF1500	M 150 OHM, 1/16W	3	
R4715	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4716	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R4717-20	ERJ3GEYJ0R00	M 0 OHM, 1/16W	4	
R4722,23	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R4724,25	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R4726	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4727-34	EXB38V820J	RESISTOR ARRAY	8	
R4735	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4736	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4737,38	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4740,41	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R4742,43	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R4744,45	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R4746	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4747	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4748,49	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R4750	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R4751	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4752	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4753	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R4754	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4755,56	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R4757,58	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	2	
R4759	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4760	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4761-63	ERJ3GEYJ821	M 820 OHM,J,1/16W	3	
R4764-66	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R4767-69	ERJ3EKF33R0	M 33 OHM, 1/16W	3	
R5004	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5006	ERJ6ENF1600	M 160 OHM, 1/10W	1	
R5007-09	ERJ6GEYJ750	M 75 OHM,J,1/10W	3	
R5010,11	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R5021	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5022	ERJ6ENF4120	M 412 OHM, 1/10W	1	
R5023,24	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R5026	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R5028-30	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
R5032	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R5053	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5054	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5056	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R5059	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R5061-63	ERJ3GEYJ151	M 150 OHM,J,1/16W	3	
R5064	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R5069	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R5071,72	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R5075,76	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R5077	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5078,79	ERJ3GEYJ0R00	M 0 OHM, 1/16W	2	
R5089	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R5092	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R5101-03	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R5104	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5105	ERJ6ENF2610	M 261 OHM, 1/10W	1	
R5106	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5107	ERJ6ENF2610	M 261 OHM, 1/10W	1	
R5108	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5109	ERJ6ENF2610	M 261 OHM, 1/10W	1	
R5110-12	ERJ6ENF1151	M1.15KOHM, 1/10W	3	
R5113-15	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R5116-18	ERJ3GEYJ561	M 560 OHM,J,1/16W	3	
R5122	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5123	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	

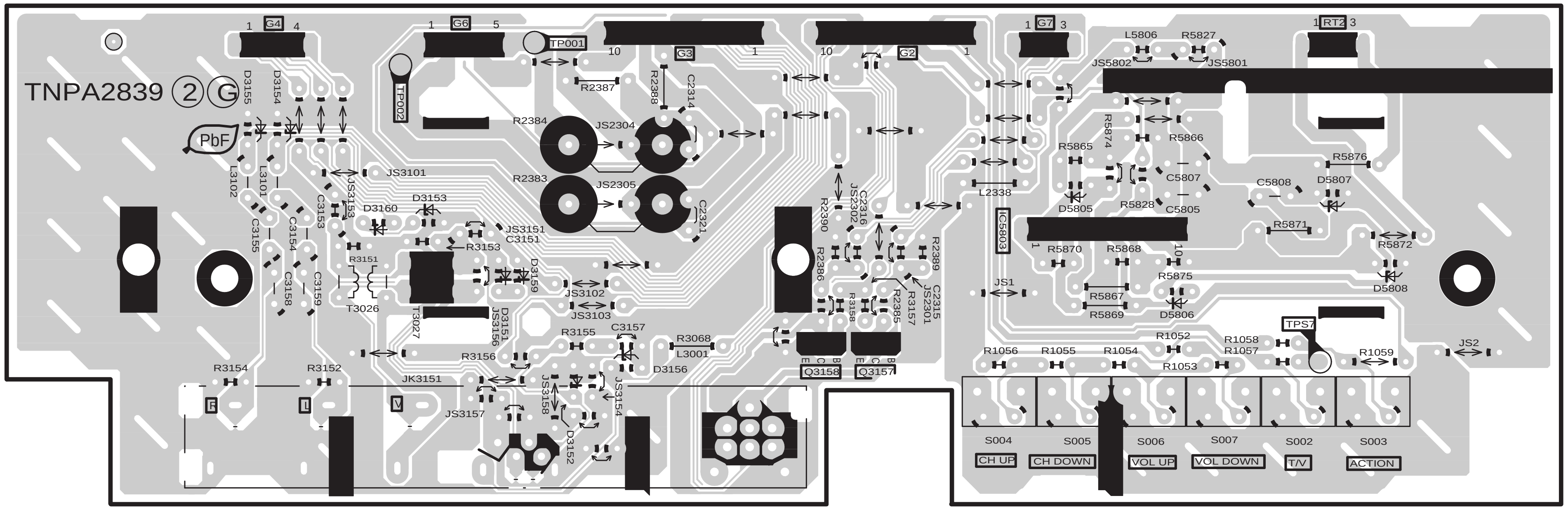
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R5124	ERJ6GEYF103	M 10KOHM,F,1/10W	1	
R5125	ERJ6ENF4702	M 47KOHM, 1/10W	1	
R5126	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R5127	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R5128-30	ERJ3GEYJ0R00	M 0 OHM, 1/16W	3	
R5135	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5136	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5137	ERJ6ENF3901	M 3.9KOHM, 1/10W	1	
R5138	ERJ6ENF1601	M 1.6KOHM, 1/10W	1	
R5139	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5140	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5142-44	ERJ6ENF2700	M 270 OHM, 1/10W	3	
R5145	ERJ6ENF7500	M 750 OHM, 1/10W	1	
R5147	ERJ6ENF1911	M1.91KOHM, 1/10W	1	
R5148-50	ERJ3GEYJ271	M 270 OHM,J,1/16W	3	
R5151-53	ERJ6GEYJ471	M 470 OHM,J,1/10W	3	
R5154-56	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	
R5162	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R5177	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R5178,79	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R5181-85	ERJ6GEYJ333	M 33KOHM,J,1/10W	5	
R5186	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R5190,91	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R5193	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R5194	ERJ3GEYJ0R00	M 0 OHM, 1/16W	1	
R5865	ER0S2CKF1002	M 10KOHM, F,1/4W	1	
R5866	ERDS2TJ912	C 9.1KOHM, J,1/4W	1	
R5867	ERDS2TJ393	C 39KOHM, J,1/4W	1	
R5869	ERDS2TJ393	C 39KOHM, J,1/4W	1	
R5870	ERDS2TJ683	C 68KOHM, J,1/4W	1	
R5871	ERDS2TJ100	C 10 OHM, J,1/4W	1	
R5875	ERDS2TJ333	C 33KOHM, J,1/4W	1	
R5876	ERDS1FJ4R7	C 4.7 OHM, J,1/2W	1	
RL451	TSE10814	SWITCH	1	
RL801	TSEH8011	RELAY	1	K6B1AGA00043 ⚠
RL802	TSE10814	SWITCH	1	⚠
RL803	TSEH0005	RELAY	1	K6B1AGA00042 ⚠
RL804	TSEH0034	RELAY	1	K6B2AGA00014 ⚠
RM001	PNA4701M04TV	REMOTE CONTROL RECEIVER	1	
RT2	TJS3A9640	3P CONNECTOR	1	K1KA03A00171
RTL	TNPA2836	CIRCUIT BOARD H	1	⚠
RTL	TXN/P10HAR	CIRCUIT BOARD P	1	⚠
RTL	TXNDG10HAR	CIRCUIT BOARD DG	1	⚠
RTL	TNPA2839	CIRCUIT BOARD G	1	⚠
RTL	TNPA2840	CIRCUIT BOARD K	1	⚠
RTL	TXN/L10HAR	CIRCUIT BOARD L	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RTL	TXN/D10HAR	CIRCUIT BOARD D	1	⚠
RTL	TNPH0537	CIRCUIT BOARD A	1	⚠
S002-07	EVQPC105K	SWITCH	6	
S801	K0F122A00172	SWITCREMOTE CONTROLH	1	
T501	ETH19K186AM	REMOCON TRANS	1	
T550	G4E1A0000011	TRANS	1	
T551	KFT6AV429F2	FLYBACK TRANS	1	⚠
T553	KRCT3004	TRANS	1	
T561	ETF18L101A	TRANS	1	⚠
T801	ETS42AU135AD	SWITCHING TRANSFORMER	1	⚠
T802	ETP30KB921GG	TRANS	1	⚠
T3001-04	TSKX026	CHOKE COIL	4	G0BYYYY00016
T3005-08	TSK1040	FERRITE CORE	4	G1BYYYH00004
T3023	TSKX026	CHOKE COIL	1	G0BYYYY00016
T3024-26	G0B600G00001	CHOKE COIL	3	
TNR001	ENG36619G	TUNER	1	⚠
TNR002	ENG36620G	TUNER	1	⚠
VR524	EVMEGSA00B15	COMTROL 100KOHMB	1	
VR538	EVMEGSA00B33	COMTROL 3KOHMB	1	
X001	TSSA096	CRYSTAL	1	H0H400400007
X4501	H0J202500002	CRYSTAL	1	

14. Schematic Diagram for printing with A4

15. Cover for printing with A4

G-BOARD
TNPA2839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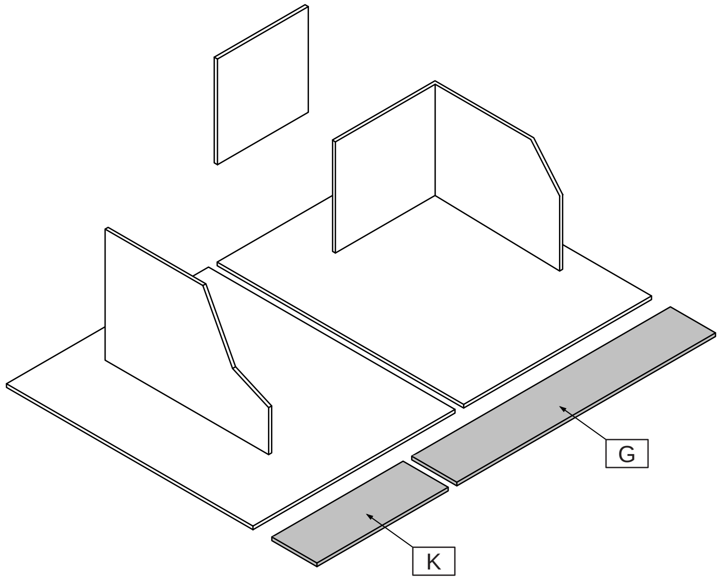
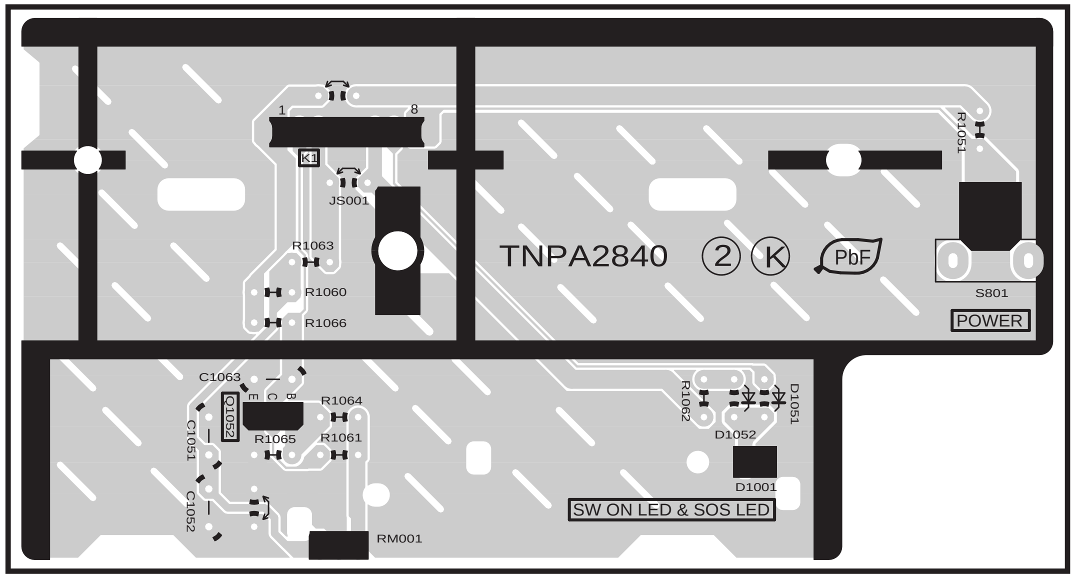


K-BOARD
TNPA2840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C1051
C1052
R1062
D1051
D1052
D1001
SW ON LED & SOS LED
RM001

Parts Location

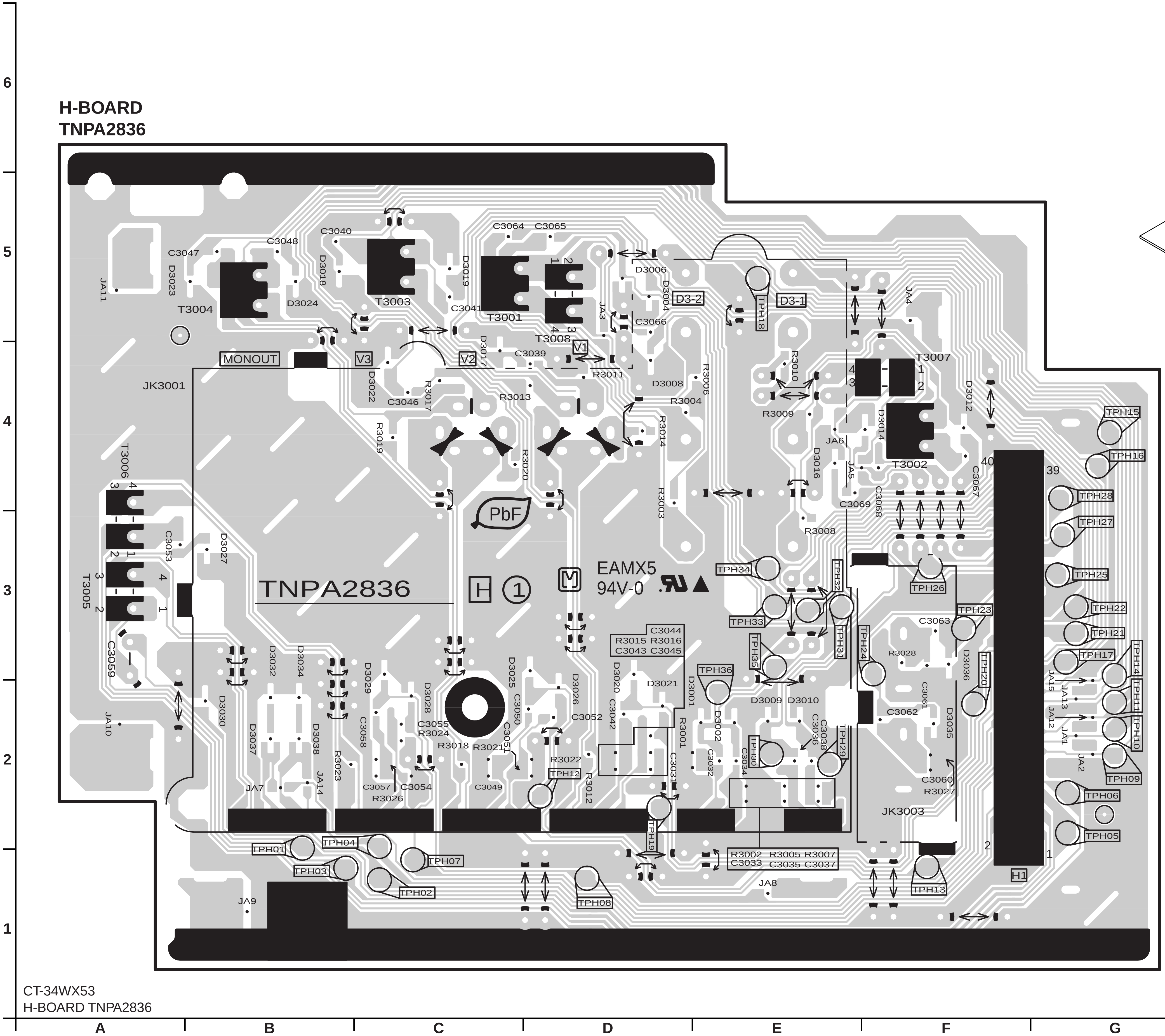
G-BOARD			
IC		**TP**	
IC5803	E-5	TP001 TP002 TPS7	C-6 B-6 F-4
TRANSISTOR			
Q3157 Q3158	D-4 D-4		

Parts Location

K-BOARD	
TRANSISTOR	
Q1052	B-1

CT-34WX53
G-BOARD TNPA2839
K-BOARD TNPA2840

H-BOARD
TNPA2836



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Parts Location

H-BOARD			
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TPH03	B-1	TPH22	G-3
TPH04	C-2	TPH23	F-3
TPH05	G-2	TPH24	F-3
TPH06	G-2	TPH25	G-3
TPH07	C-1	TPH26	F-3
TPH08	D-1	TPH27	G-3
TPH09	G-2	TPH28	G-4
TPH10	G-2	TPH29	E-2
TPH11	G-2	TPH30	E-2
TPH12	D-2	TPH31	E-2
TPH13	F-1	TPH32	E-3
TPH14	G-3	TPH33	E-3
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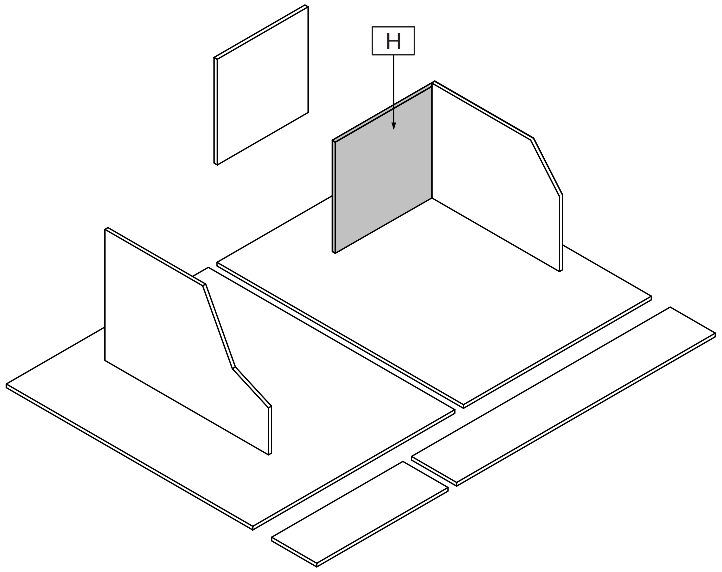

CT-34WX53
H-BOARD TNPA2836

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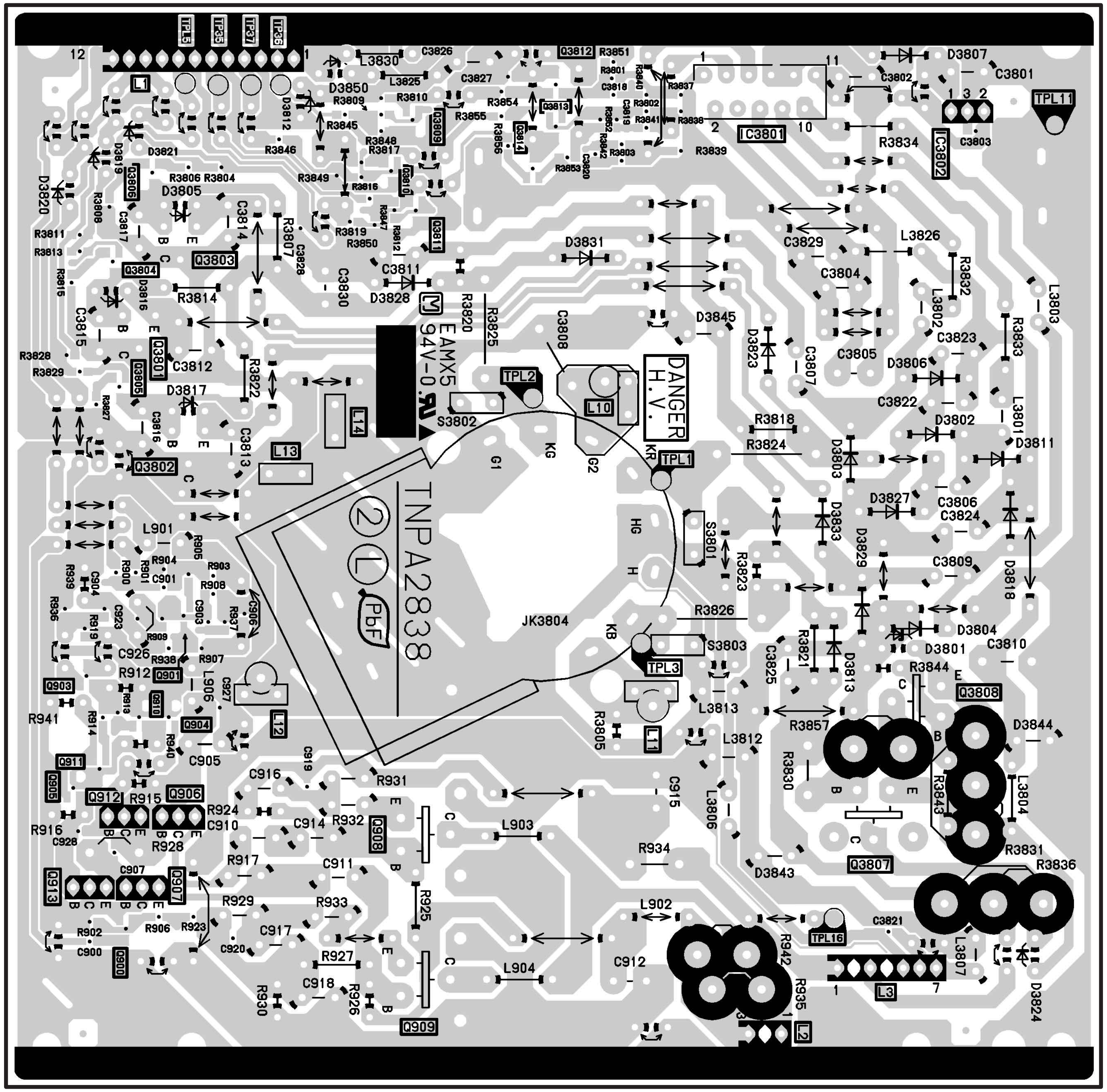
L-BOARD
TXN/L10HAR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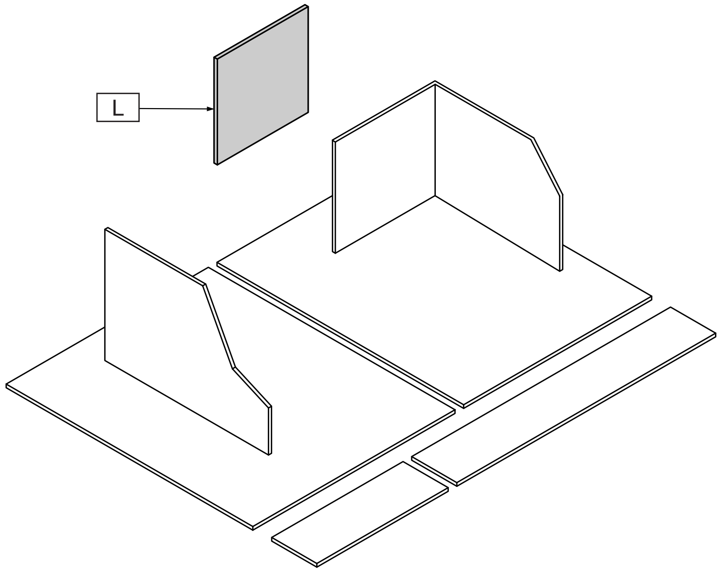
S3801
S3803
L11
L12
R3805
L3813
L3812
D3831
D3845
D3823
C3807
C3829
C3804
C3805
L3826
R3832
L3802
L3803
R3833
C3823
D3806
C3822
D3802
L3801
R3818
R3824
D3803
D3811
D3827
D3833
C3806
C3824
D3829
C3809
D3818
R3823
R3826
C3825
R3821
D3813
D3804
D3801
C3810
R3844
Q3808
R3857
R3830
D3844
R3843
L3804
L3806
C915
Q3807
D3843
R3831
R3836
IC3801
1
11
2
10
D3807
C3801
C3802
1 3 2
IC3802
C3803
R3834
TPL11
L901
R904
R905
R903
R900
R901
C901
R908
R939
C904
R936
C923
C903
R937
C906
R919
R909
C926
R938
R907
R912
Q901
L906
C927
Q903
R913
Q910
R941
R914
Q904
R940
C905
Q911
Q905
C916
C919
R931
Q912
R915
Q906
R924
C910
R916
C928
R928
C914
R932
Q908
L903
R917
C911
R934
C907
Q907
Q913
R929
R933
R925
R902
R906
R923
C917
C920
C900
Q900
R927
C918
R930
R926
Q909
L904
C912
L902
R942
TPL16
C3821
L3807
D3824
R935
L3
1
7
L2
B C E
E C B

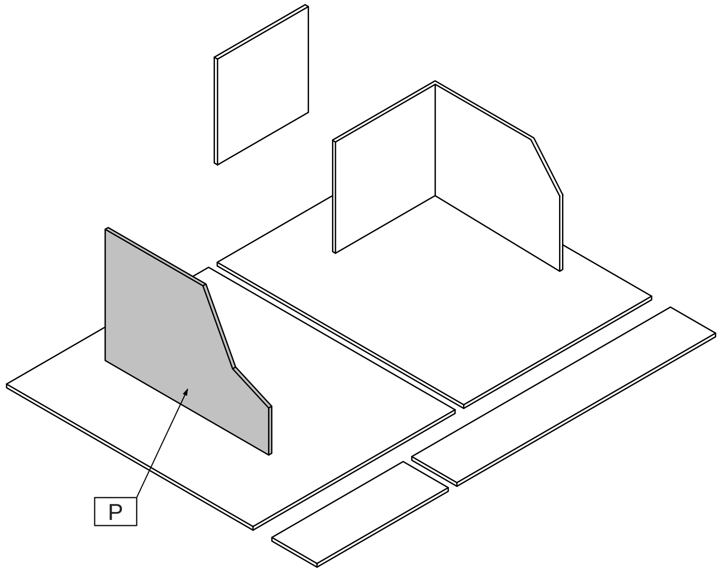


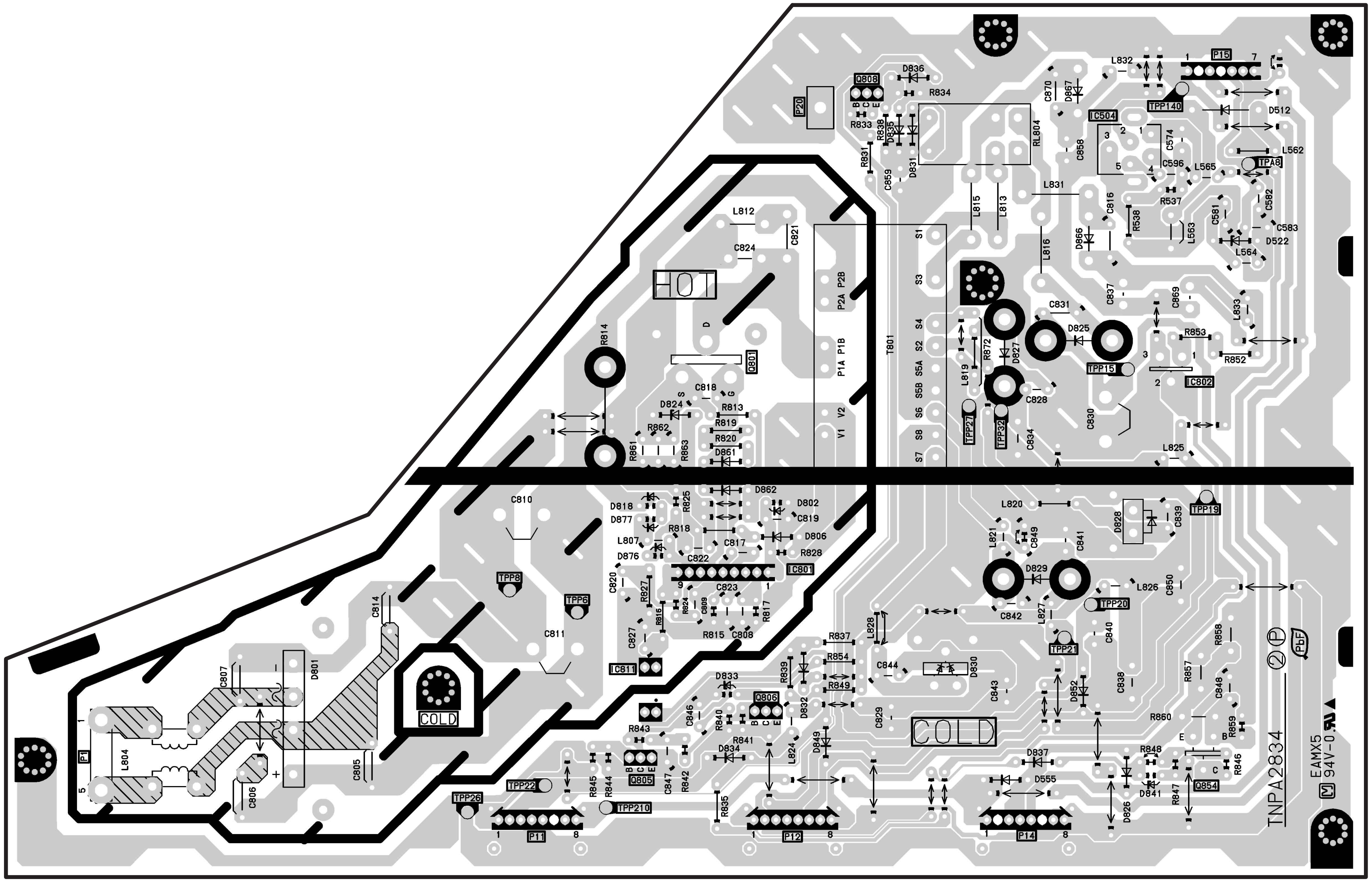
Parts Location

L-BOARD	
IC	
IC3801	D-5
IC3802	E-5
TRANSISTOR	
Q3801	A-4
Q3802	A-4
Q3803	B-5
Q3804	A-5
Q3805	A-4
Q3806	A-5
Q3807	E-2
Q3808	E-3
Q3809	C-5
Q3810	C-5
Q3811	C-5
Q3812	C-5
Q3813	C-5
Q3814	C-5
Q900	A-1
Q901	A-3
Q903	A-3
Q904	B-2
Q905	A-2
Q906	A-2
Q907	A-2
Q908	C-2
Q909	C-1
Q910	A-3
Q911	A-2
Q912	A-2
Q913	A-2
TP	
TP35	B-6
TP36	B-6
TP37	B-6
TPL1	D-4
TPL11	E-5
TPL16	E-2
TPL2	C-4
TPL3	D-3
TPL5	B-6

A B C D E F G H I

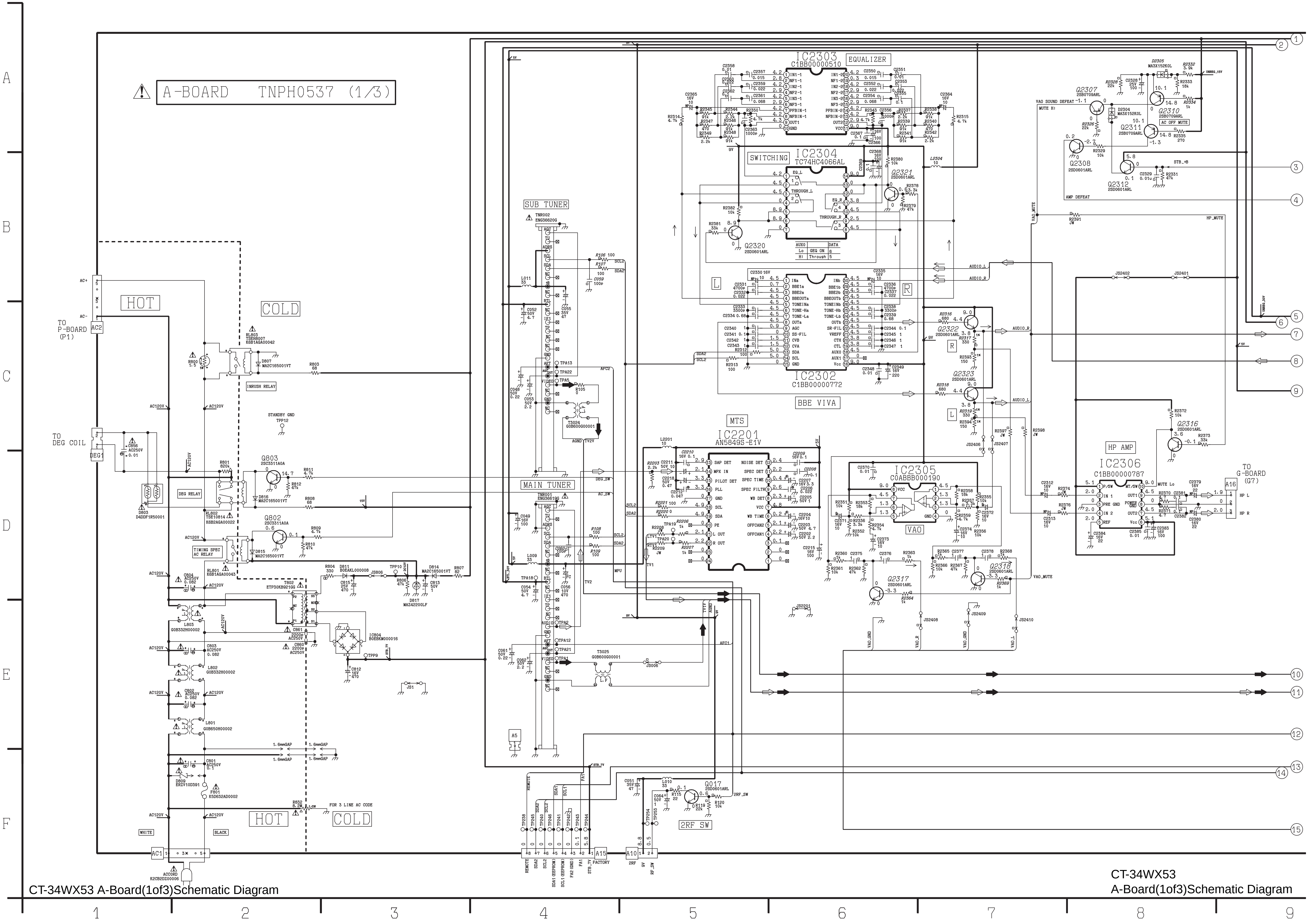
P-BOARD
TXN/P10HAR




HOT
COLD
COLD
TNPA2834
IC801
IC802
IC811
IC504
Q801
Q805
Q806
Q808
Q854
T801
P1
P11
P12
P14
P15
P20
TPA8
TPP140
TPP15
TPP19
TPP20
TPP21
TPP210
TPP22
TPP26
TPP27
TPP32
TPP6
TPP8
1
2
3
4
5
6
A
B
C
D
E
F
G
H
I

Parts Location

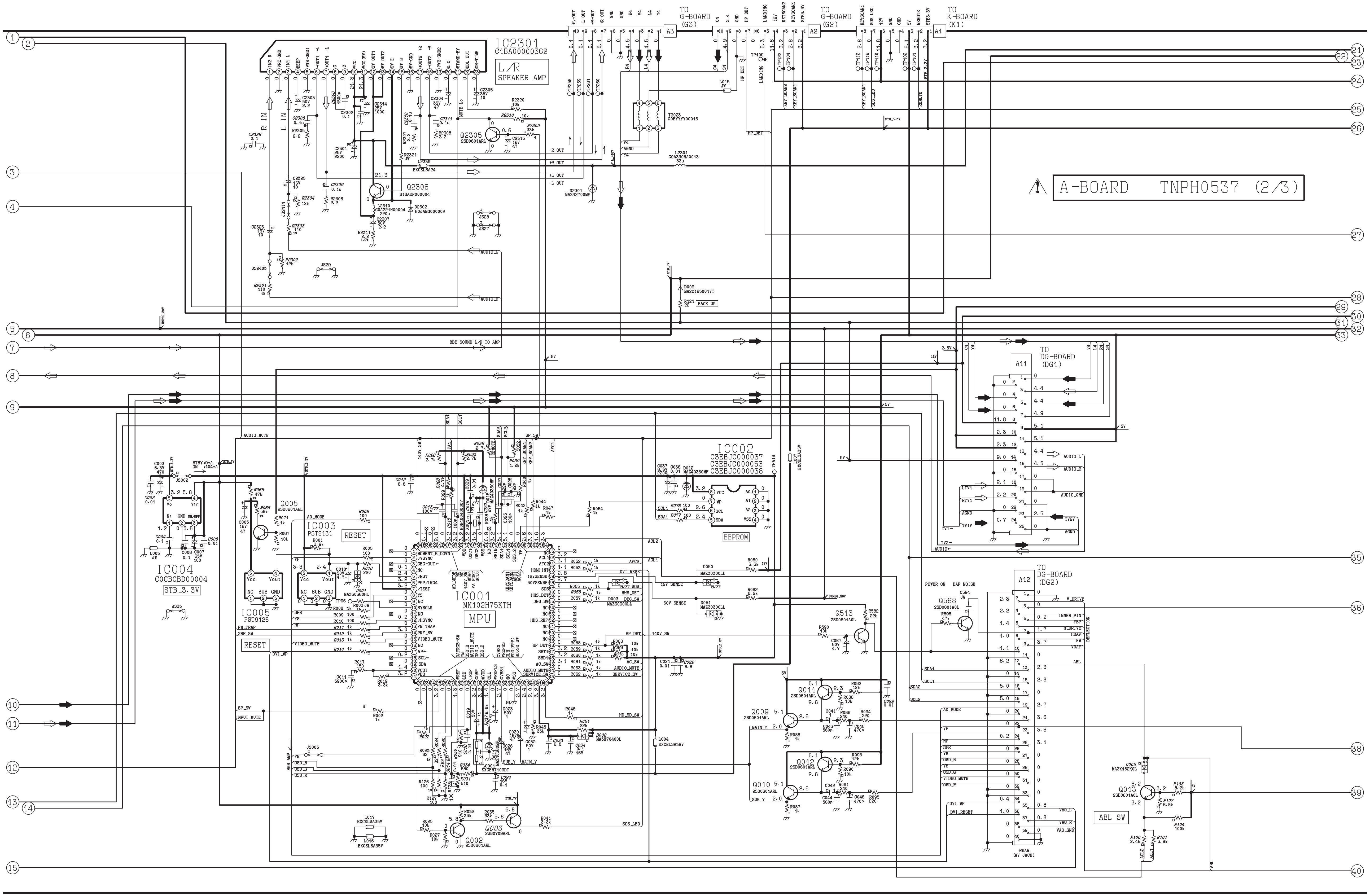
P-BOARD			
IC		**TP**	
IC504	F-4	TPA8	F-4
IC801	D-2	TPP140	F-4
IC802	F-3	TPP15	F-3
IC811	D-2	TPP19	F-3
		TPP20	F-2
TRANSISTOR		TPP21	F-2
Q801	D-3	TPP210	C-1
Q805	D-1	TPP22	C-1
Q806	D-2	TPP26	C-1
Q808	E-4	TPP27	E-3
Q854	F-1	TPP32	E-3
		TPP6	C-2
		TPP8	C-2


A-BOARD TNPH0537 (1/3)
HOT
COLD
HOT
COLD
TO P-BOARD (P1)
AC2
TO DEG COIL
DEG1
AC1
ACCORD K2CB2DZ00006
WHITE
BLACK
INRUSH RELAY
DEG RELAY
TIMING SPEC AC RELAY
STANDBY GND TPP12
RL803 TSEH8007 K6B1AGA00042
RL802 TSE10814 K6B2AGA00022
RL801 K6B1AGA00043
Q803 2SC3311A0A
Q802 2SC3311A0A
D807 MA2C165001VT
D816 MA2C165001VT
D815 MA2C165001VT
D814 MA2C165001VT
D803 D4DDF1R50001
D811 B0EAKL000008
D817 MAZ42200LF
T802 ETP30KB921GG
IC804 B0EBKM000016
L803 G0B332H00002
L802 G0B332H00002
L801 G0B650H00002
D809 ERZV10D391
F801 K5D632AD0002
C801 AC250V 0.1
C802 AC250V 0.082
C803 AC250V 0.082
C804 AC250V 0.082
C856 AC250V 0.01
C860 2200p AC250V
C861 2200p AC250V
R800 1.5
R832 8.2M
FOR 3 LINE AC CODE
1.6mmGAP
SUB TUNER
TNR002 ENG36620G
MAIN TUNER
TNR001 ENG36619G
T3024 G0B600G00001
T3025 G0B600G00001
A5
REMOTE
SDA2
SCL2
SDA1 (EEPROM)
SCL1 (EEPROM)
FA2 GND
FA1
STB_TV
FACTORY
A15
A10
2RF
9V
RF_SW
Q017 2SD0601ARL
2RF SW
MTS
IC2201 AN5849S-E1V
SAP DET
NOISE DET
MPX IN
SPEC DET
PILOT DET
SPEC TIME
PLL
SPEC FILTR
GND
WB DET
SCL
VCC
SDA
WB TIME
PE
OFFCAN2
L OUT
OFFCAN1
R OUT
IC2303 C1BB00000510
EQUALIZER
IC2304 TC74HC4066AL
SWITCHING
EQ_L
THROUGH_L
EQ_R
THROUGH_R
Q2320 2SD0601ARL
Q2321 2SD0601ARL
AUXO DATA
Lo GEQ ON 6
Hi Through 5
IC2302 C1BB00000772
BBE VIVA
L
R
Q2322 2SD0601ARL
Q2323 2SD0601ARL
AUDIO_R
AUDIO_L
IC2305 C0ABBB000190
VAO
Q2317 2SD0601ARL
Q2318 2SD0601ARL
VAO_MUTE
VAO_GND
VAO_R
VAO_L
IC2306 C1BB00000787
HP AMP
MUTE Lo
A16
TO G-BOARD (G7)
HP L
HP R
HP_MUTE
Q2316 2SD0601ARL
Q2307 2SB0709ARL
Q2310 2SB0709ARL
Q2311 2SB0709ARL
Q2308 2SD0601ARL
Q2312 2SD0601ARL
VAO SOUND DEFEAT
MUTE H!
AC OFF MUTE
AMP DEFEAT
STB_+B
UNREG_15V
D2305 MA3X152K0L
D2304 MA3X152K0L
JS2401
JS2402
JS2406
JS2407
JS2408
JS2409
JS2410
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F

CT-34WX53 A-Board(1of3)Schematic Diagram

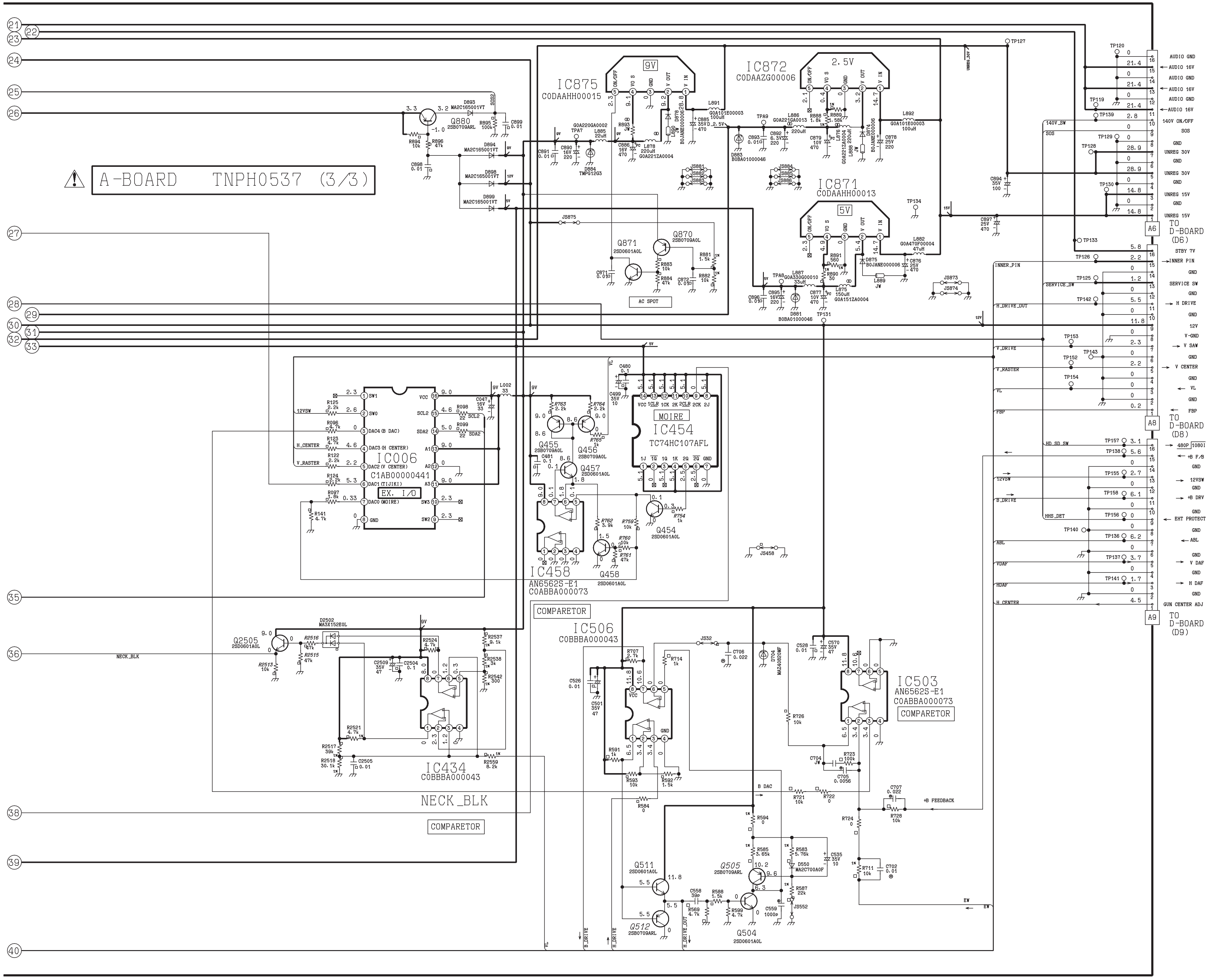
CT-34WX53

A-Board(1of3)Schematic Diagram


A-BOARD TNPH0537 (2/3)
IC2301
C1BA00000362
L/R SPEAKER AMP
TO G-BOARD (G3)
TO G-BOARD (G2)
TO K-BOARD (K1)
A3
A2
A1
Q2305
2SD0601ARL
Q2306
B1BAEF000004
T3023
G0BYYYY00016
L2301
G0A330HA0013
D2301
MAZ42700MF
IC002
C3EBJC000037
C3EBJC000053
C3EBJC000038
EEPROM
IC001
MN102H75KTH
MPU
IC003
PST9131
RESET
IC004
C0CBCBD00004
STB_3.3V
IC005
PST9128
RESET
Q005
2SD0601ARL
TO DG-BOARD (DG1)
A11
TO DG-BOARD (DG2)
A12
DEFLECTION
REAR (AV JACK)
Q568
2SD0601A0L
Q513
2SD0601A0L
Q011
Q009
Q012
Q010
2SD0601ARL
Q002
2SD0601ARL
Q003
2SB0709ARL
Q013
2SD0601A0L
ABL SW
BBE SOUND L/R TO AMP
AUDIO_L
AUDIO_R
AUDIO_MUTE
BACK UP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
21
22
23
24
25
26
27
28
29
30
31
32
33
35
36
38
39
40

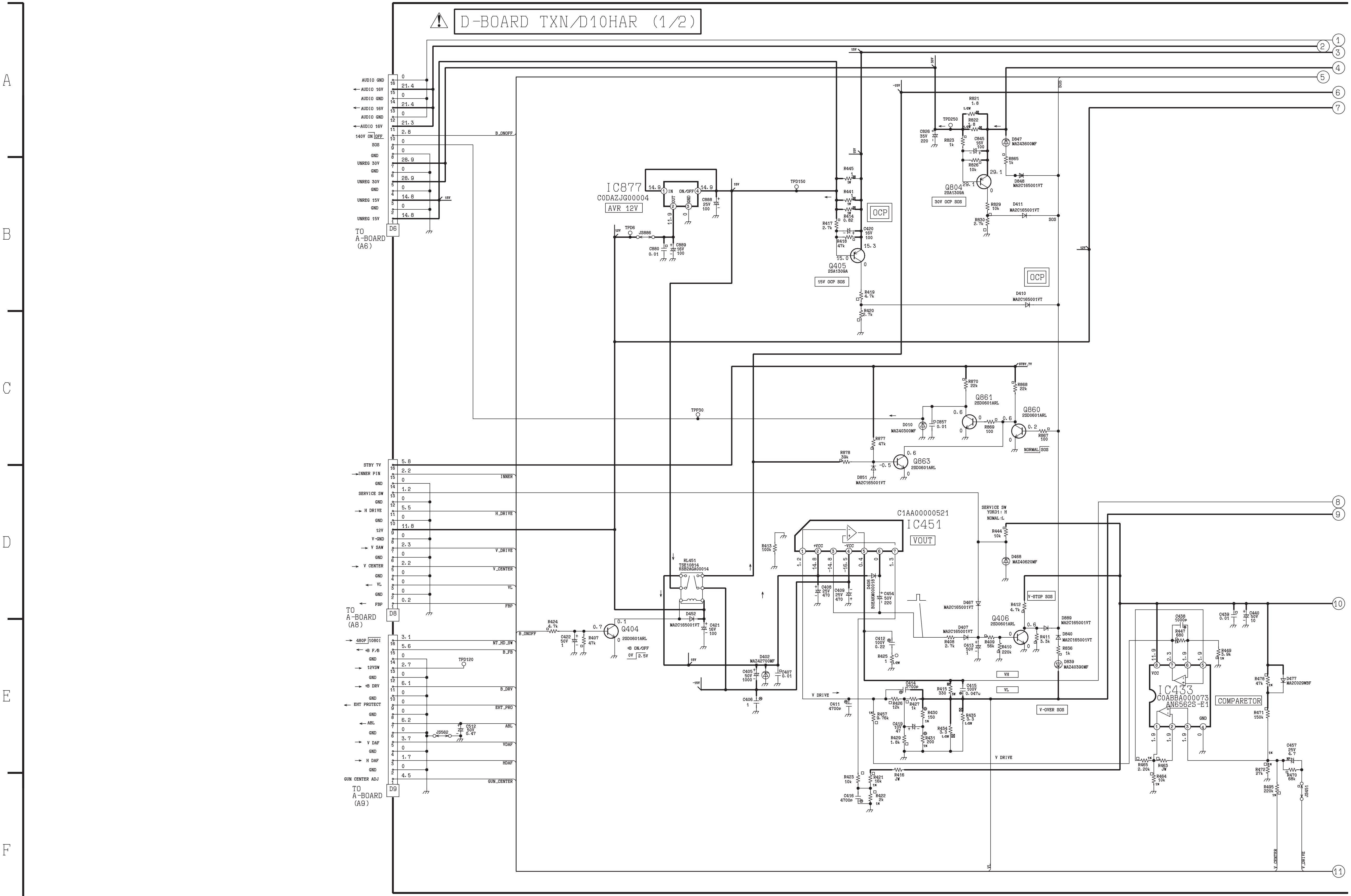
CT-34WX53
A-Board(2of3)Schematic Diagram

CT-34WX53
A-Board(2of3)Schematic Diagram


A-BOARD TNPH0537 (3/3)
IC875
C0DAAHH00015
9V
IC872
C0DAAZG00006
2.5V
IC871
C0DAAHH00013
5V
Q880
2SB0709ARL
Q870
2SB0709A0L
Q871
2SD0601A0L
AC SPOT
IC006
C1AB00000441
EX. I/O
IC454
TC74HC107AFL
MOIRE
Q455
Q456
Q457
Q454
Q458
IC458
AN6562S-E1
C0ABBA000073
COMPARETOR
IC506
C0BBBA000043
IC503
AN6562S-E1
C0ABBA000073
COMPARETOR
IC434
C0BBBA000043
NECK_BLK
COMPARETOR
Q2505
2SD0601A0L
Q511
2SD0601A0L
Q512
2SB0709ARL
Q505
2SB0709ARL
Q504
2SD0601A0L
A6
TO D-BOARD (D6)
A8
TO D-BOARD (D8)
A9
TO D-BOARD (D9)
AUDIO GND
AUDIO 16V
140V ON/OFF
SOS
GND
UNREG 30V
UNREG 15V
STBY 7V
INNER PIN
SERVICE SW
H DRIVE
12V
V-GND
V SAW
V CENTER
VL
FBP
480P 1080I
+B F/B
12VSW
+B DRV
EHT PROTECT
ABL
V DAF
H DAF
GUN CENTER ADJ
+B FEEDBACK
B DAC
EW
21
22
23
24
25
26
27
28
29
30
31
32
33
35
36
38
39
40
18
19
20
21
22
23
24
25
26

CT-34WX53
A-Board(3of3)Schematic Diagram

CT-34WX53
A-Board(3of3)Schematic Diagram


D-BOARD TXN/D10HAR (1/2)
A
B
C
D
E
F
TO A-BOARD (A6)
D6
AUDIO GND
AUDIO 16V
140V ON/OFF
SOS
GND
UNREG 30V
UNREG 15V
IC877
C0DAZJG00004
AVR 12V
TPD150
TPD6
JS886
OCP
Q405
2SA1309A
15V OCP SOS
Q804
2SA1309A
30V OCP SOS
D847
MA2436000MF
D848
MA2C165001VT
D411
MA2C165001VT
D410
MA2C165001VT
TPD250
TPP30
Q861
2SD0601ARL
Q860
2SD0601ARL
Q863
2SD0601ARL
D010
MAZ40300MF
D851
MA2C165001VT
NORMAL SOS
STBY 7V
TO A-BOARD (A8)
D8
STBY 7V
INNER PIN
SERVICE SW
H DRIVE
12V
V-GND
V SAW
V CENTER
VL
FBP
INNER
H_DRIVE
V_DRIVE
V_CENTER
RL451
TSE10814
K6B2AGA00014
D452
MA2C165001VT
IC451
C1AA00000521
VOUT
D402
MAZ42700MF
Q404
2SD0601ARL
+B ON/OFF
B_ONOFF
SERVICE SW
YOKO1: H
NOMAL:L
D468
MAZ40620MF
D467
MA2C165001VT
D407
MA2C165001VT
Q406
2SD0601ARL
V-STOP SOS
D889
MA2C165001VT
D840
MA2C165001VT
D839
MAZ40390MF
V-OVER SOS
VH
VL
V DRIVE
TO A-BOARD (A9)
D9
480P 1080I
+B F/B
12VSW
+B DRV
EHT PROTECT
ABL
V DAF
H DAF
GUN CENTER ADJ
NT_HD_SW
B_FB
B_DRV
EHT_PRO
VDAF
HDAF
GUN_CENTER
TPD120
JS562
IC433
C0ABBA000073
AN6562S-E1
COMPARETOR
D477
MA2C029WBF
JS451
V_CENTER
V_DRIVE
1
2
3
4
5
6
7
8
9
10
11

CT-34WX53
D-Board(1of2)Schematic Diagram

CT-34WX53
D-Board(1of2)Schematic Diagram

1
2
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5
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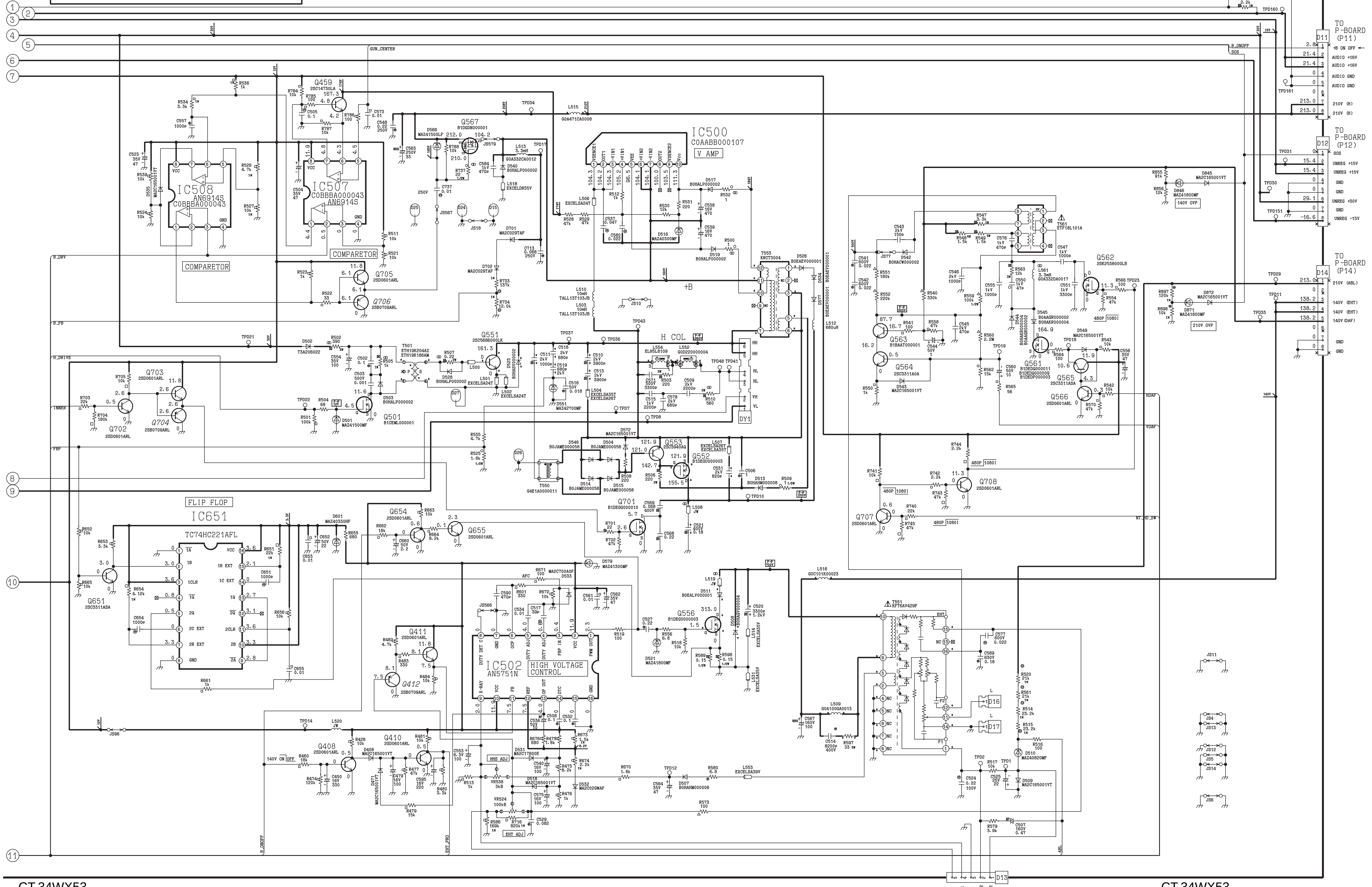
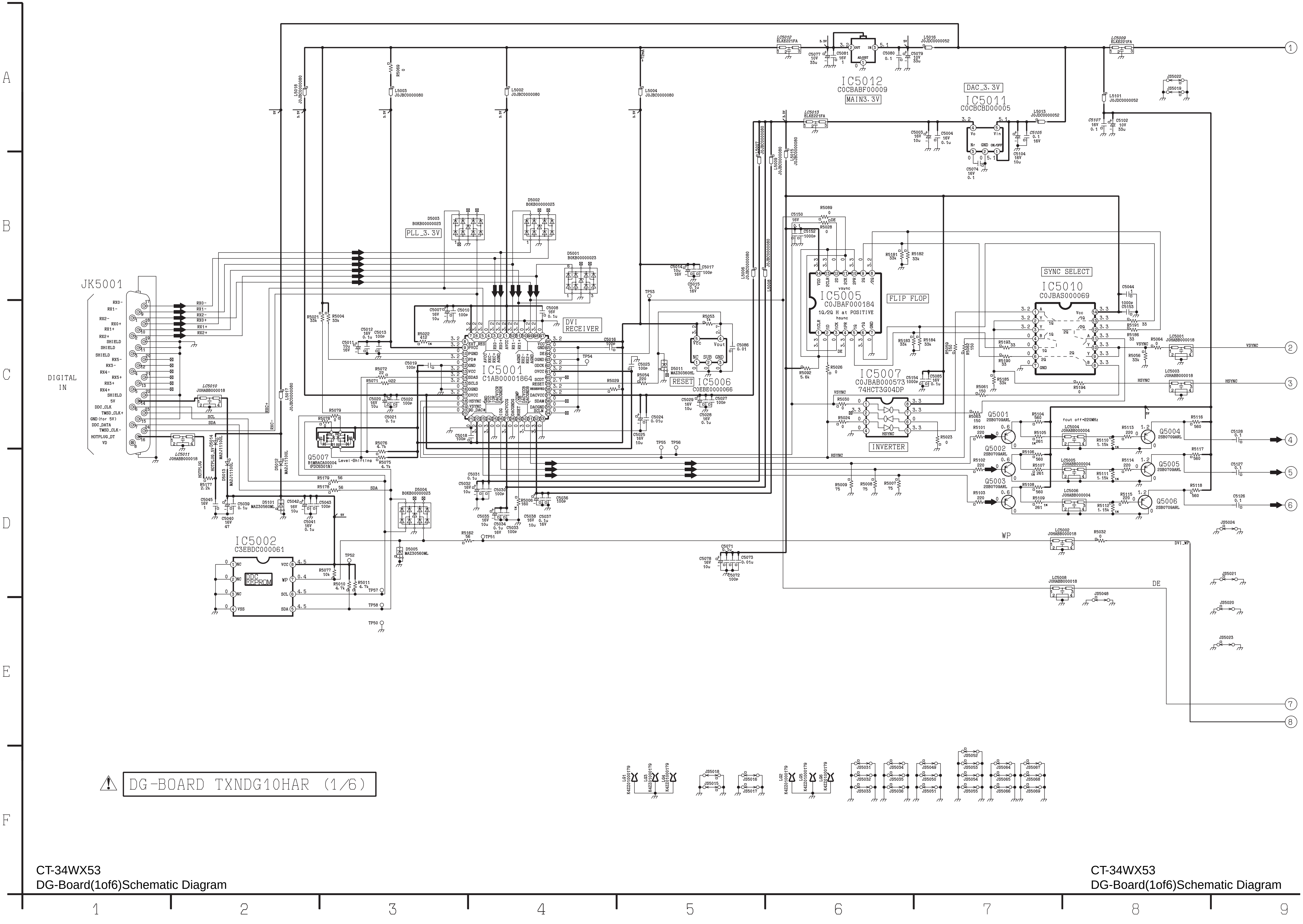
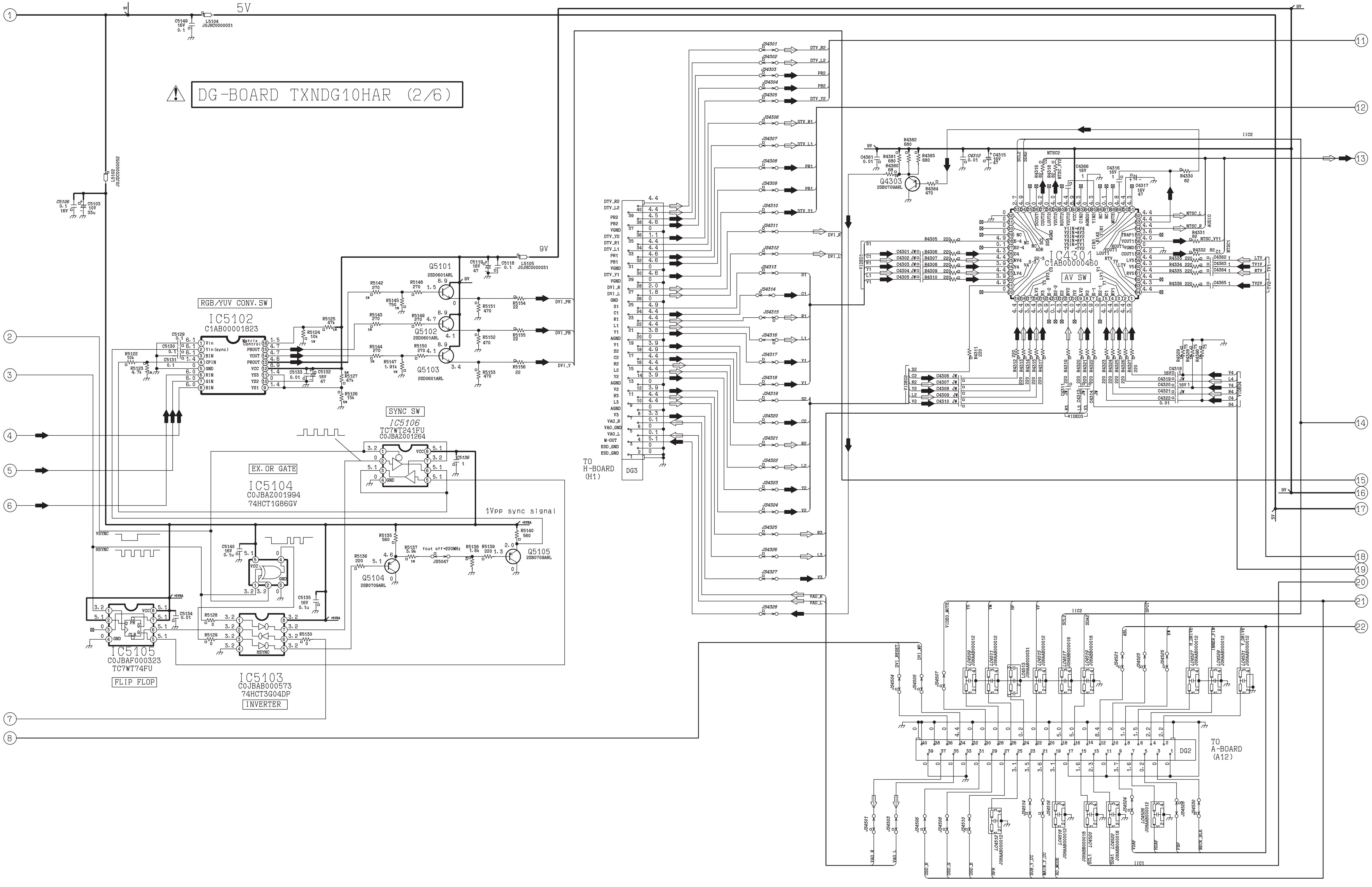
8
9

⚠ D-BOARD TXN/D10HAR (2/2)


IC500
C0AABB000107
V AMP
IC508
AN6914S
C0BBBA000043
COMPARETOR
IC507
C0BBBA000043
AN6914S
COMPARETOR
H COL
DY1
FLIP FLOP
IC651
TC74HC221AFL
IC502
AN5751N
HIGH VOLTAGE CONTROL
T551
KFT6AY429F
T561
ETF18L101A
T553
KRCT3004
TO P-BOARD (P11)
TO P-BOARD (P12)
TO P-BOARD (P14)
D11
D12
D14
D13
D16
D17
TEST PIN
EHT PRO2
EHT PRO1
GND
TPD2
TPD1
+B ON OFF
AUDIO +16V
AUDIO GND
210V (H)
SOS
UNREG +15V
UNREG +30V
UNREG -15V
210V (ABL)
140V (EHT)
140V (DAF)
140V OVP
210V OVP
HHS ADJ
EHT ADJ
Q459
Q567
Q705
Q706
Q703
Q702
Q704
Q551
Q501
Q553
Q552
Q701
Q654
Q655
Q651
Q411
Q412
Q410
Q408
Q556
Q562
Q561
Q563
Q564
Q565
Q566
Q708
Q707
9
10
11
12
13
14
15
16
17


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
DG-BOARD TXNDG10HAR (1/6)
JK5001
DIGITAL IN
RX0-
RX1-
RX2-
RX0+
RX1+
RX2+
SHIELD
RX5-
RX3-
RX4-
RX5+
RX3+
RX4+
5V
DDC_CLK
TWSD_CLK+
GND(for 5V)
DDC_DATA
TWSD_CLK-
HOTPLUG_DT
VD
LC5010
J0HABB000018
LC5011
J0HABB000018
SCL
SDA
HOTPLUG
HOTPLUG_5V
IC5002
C3EBDC000061
DDC EEPROM
NC
VSS
VCC
WP
SCL
SDA
TP52
TP57
TP58
TP50
Q5007
B1MBACA00004
(FDC6301N)
Level-Shifting
D5003
B0KB00000023
PLL_3.3V
D5002
B0KB00000023
D5001
B0KB00000023
D5004
B0KB00000023
D5005
MAZ30560ML
D5101
MAZ30560ML
IC5001
C1AB00001864
DVI RECEIVER
TP53
TP54
TP55
TP56
TP51
D5011
MAZ30360HL
RESET
IC5006
C0EBE0000066
Vcc
Vout
NC
SUB
GND
IC5012
C0CBABF00009
MAIN3.3V
IC5011
C0CBCBD00005
DAC_3.3V
IC5005
C0JBAF000184
1Q/2Q H at POSITIVE
FLIP FLOP
vsync
hsync
IC5007
C0JBAB000573
74HCT3G04DP
INVERTER
HSYNC
VSYNC
IC5010
C0JBAS000069
SYNC SELECT
Q5001
2SB0709ARL
Q5002
2SB0709ARL
Q5003
2SB0709ARL
Q5004
2SB0709ARL
Q5005
2SB0709ARL
Q5006
2SB0709ARL
LC5004
J0HABB000004
LC5005
J0HABB000004
LC5006
J0HABB000004
fcut off=220MHz
LC5001
J0HABB000018
LC5003
J0HABB000018
LC5002
J0HABB000018
LC5008
J0HABB000018
LC5009
ELKE221FA
LC5012
ELKE221FA
LC5013
ELKE221FA
WP
DVI_WP
DE
①
②
③
④
⑤
⑥
⑦
⑧
JS5022
JS5019
JS5024
JS5021
JS5020
JS5023
JS5048
JS5018
JS5015
JS5016
JS5017
JS5031
JS5032
JS5033
JS5034
JS5035
JS5036
JS5049
JS5050
JS5051
JS5052
JS5053
JS5054
JS5055
JS5064
JS5065
JS5066
JS5067
JS5068
JS5069
LG1
LG3
LG4
LG2
LG5
LG6
K4ZZ01000179

CT-34WX53
DG-Board(1of6)Schematic Diagram


DG-BOARD TXNDG10HAR (2/6)
5V
9V
RGB/YUV CONV.SW
IC5102
C1AB00001823
Q5101
2SD0601ARL
Q5102
2SD0601ARL
Q5103
2SD0601ARL
DVI_PR
DVI_PB
DVI_Y
SYNC SW
IC5106
TC7WT241FU
C0JBAZ001264
EX.OR GATE
IC5104
C0JBAZ001994
74HCT1G86GV
1Vpp sync signal
VSYNC
HSYNC
Q5104
2SB0709ARL
Q5105
2SB0709ARL
fcut off=220MHz
IC5105
C0JBAF000323
TC7WT74FU
FLIP FLOP
IC5103
C0JBAB000573
74HCT3G04DP
INVERTER
TO
H-BOARD
(H1)
DG3
Q4303
2SB0709ARL
IC4301
C1AB00000460
AV SW
IIC2
NTSC2
VIDEO1
VIDEO2
VIDEO3
VIDEO4
TO
A-BOARD
(A12)
DG2
IIC1
1
2
3
4
5
6
7
8
11
12
13
14
15
16
17
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19
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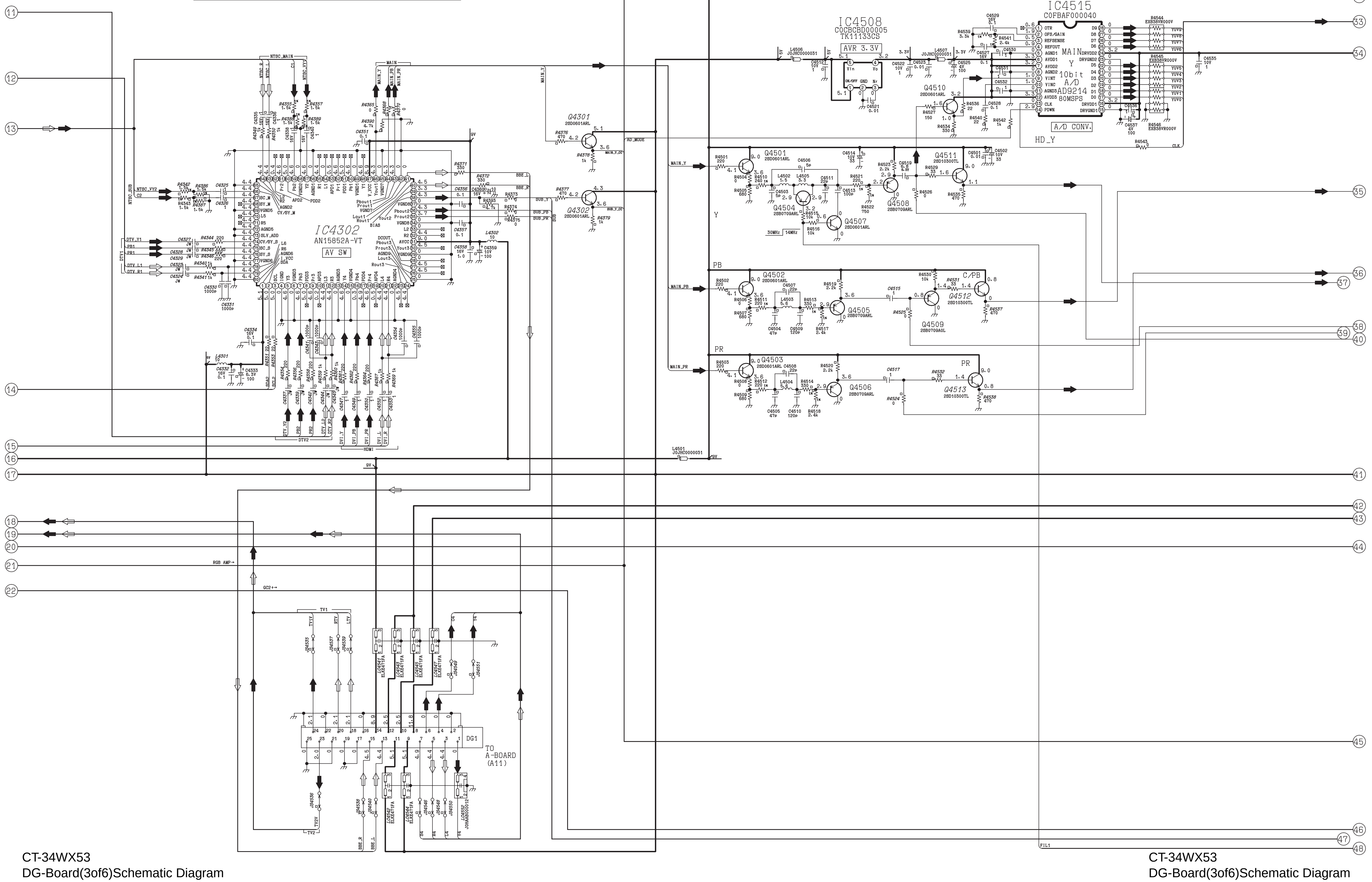
22

CT-34WX53
DG-Board(2of6)Schematic Diagram

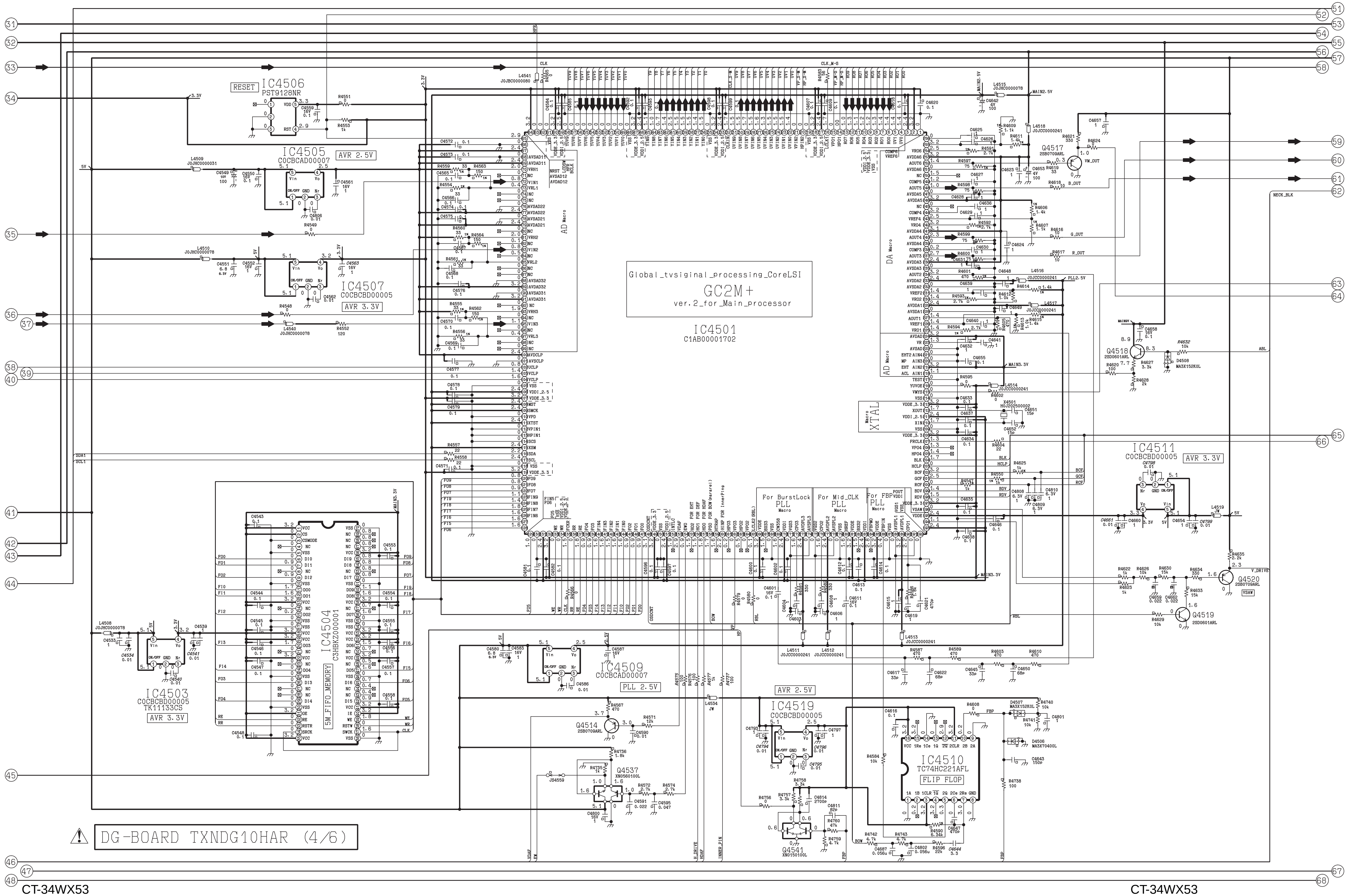
CT-34WX53
DG-Board(2of6)Schematic Diagram

⚠ DG-BOARD TXNDG10HAR (3/6)


IC4302
AN15852A-VT
AV SW
IC4508
C0CBCBD00005
TK11133CS
AVR 3.3V
IC4515
C0FBAF000040
MAIN
Y
10bit
A/D
AD9214
80MSPS
A/D CONV.
HD_Y
CLK
Q4301
2SD0601ARL
Q4302
2SD0601ARL
Q4501
2SD0601ARL
Q4502
2SD0601ARL
Q4503
2SD0601ARL
Q4504
2SB0709ARL
Q4505
2SB0709ARL
Q4506
2SB0709ARL
Q4507
2SD0601ARL
Q4508
2SB0709ARL
Q4509
2SB0709ARL
Q4510
2SD0601ARL
Q4511
2SD1030TL
Q4512
2SD1030TL
Q4513
2SD1030TL
Y
PB
PR
C/PB
NTSC_MAIN
MAIN
MAIN_Y
MAIN_PB
MAIN_PR
NTSC_SUB
NTSC_VY2
DTV_Y1
PB1
PR1
DTV_L1
DTV_R1
DTV1
SUB_Y
SUB_PB
SUB_PR
AD_MODE
MAIN_Y_DC
SUB_Y_DC
BBE_L
BBE_R
9V
5V
3.3V
30MHz
14MHz
L4501
J0JHC0000031
RGB AMP→
GC2←→
TV1
TV2
DTV2
HDMI
FIL1
DG1
TO
A-BOARD
(A11)
⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒
㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽

CT-34WX53
DG-Board(3of6)Schematic Diagram

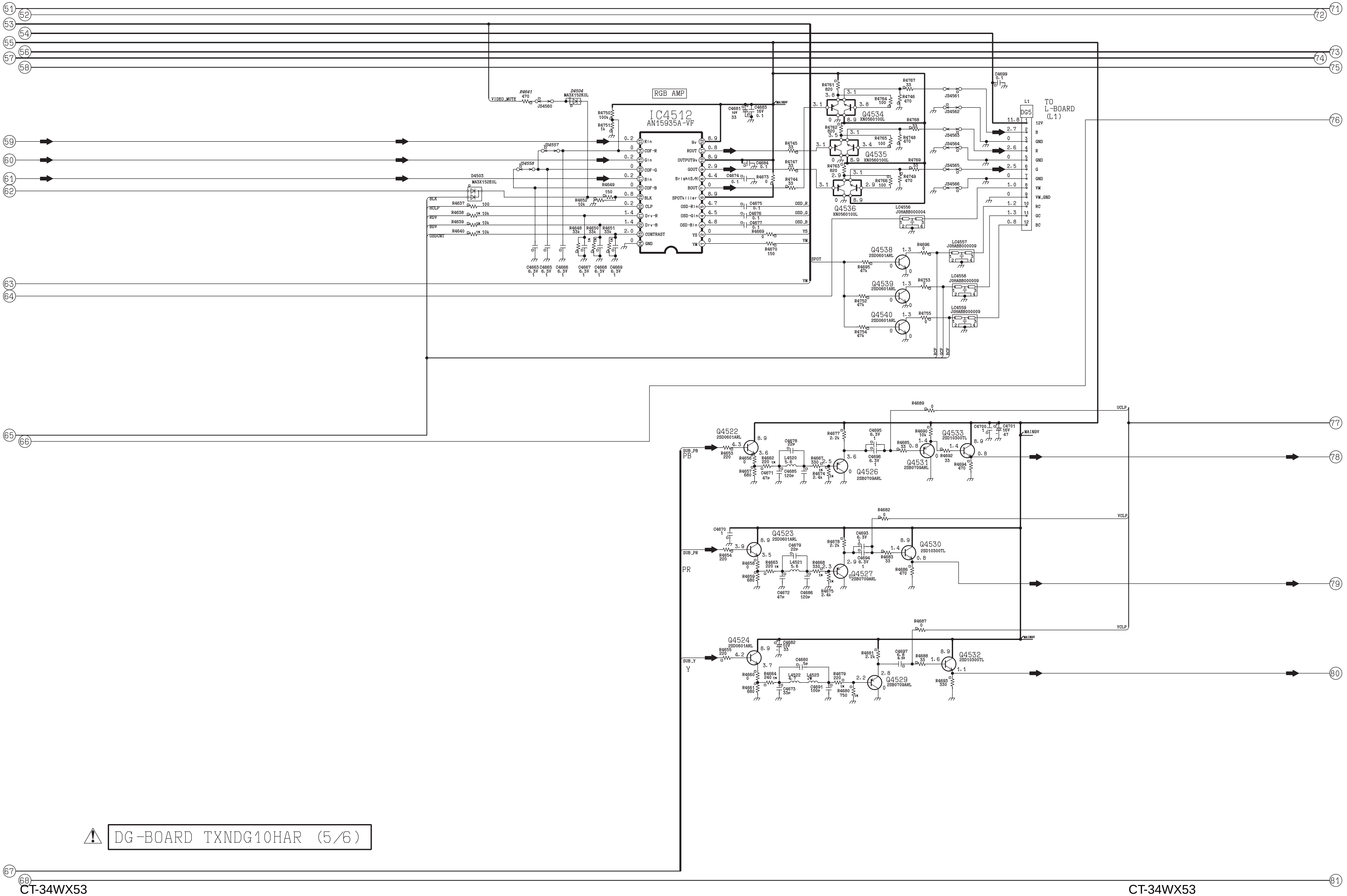
CT-34WX53
DG-Board(3of6)Schematic Diagram


Global_tvsiginal_processing_CoreLSI
GC2M+
ver.2_for_Main_processor
IC4501
C1AB00001702
IC4504
C3EBKZ000001
5M_FIFO_MEMORY
IC4506
PST9128NR
RESET
IC4505
C0CBCAD00007
AVR 2.5V
IC4507
C0CBCBD00005
AVR 3.3V
IC4503
C0CBCBD00005
TK11133CS
AVR 3.3V
IC4509
C0CBCAD00007
PLL 2.5V
IC4519
C0CBCBD00005
AVR 2.5V
IC4510
TC74HC221AFL
FLIP FLOP
IC4511
C0CBCBD00005
AVR 3.3V
AD Macro
DA Macro
XTAL
For BurstLock PLL Macro
For Mid_CLK PLL Macro
For FBP PLL Macro
Q4517
2SB0709ARL
Q4518
2SD0601ARL
Q4520
2SB0709ARL
Q4519
2SD0601ARL
Q4514
2SB0709ARL
Q4537
XN0560100L
Q4541
XN0150100L
VM_OUT
B_OUT
G_OUT
R_OUT
NECK_BLK
ABL
V_DRIVE
VSAW
H_DRIVE
INNER_PIN
FBP
DG-BOARD TXNDG10HAR (4/6)

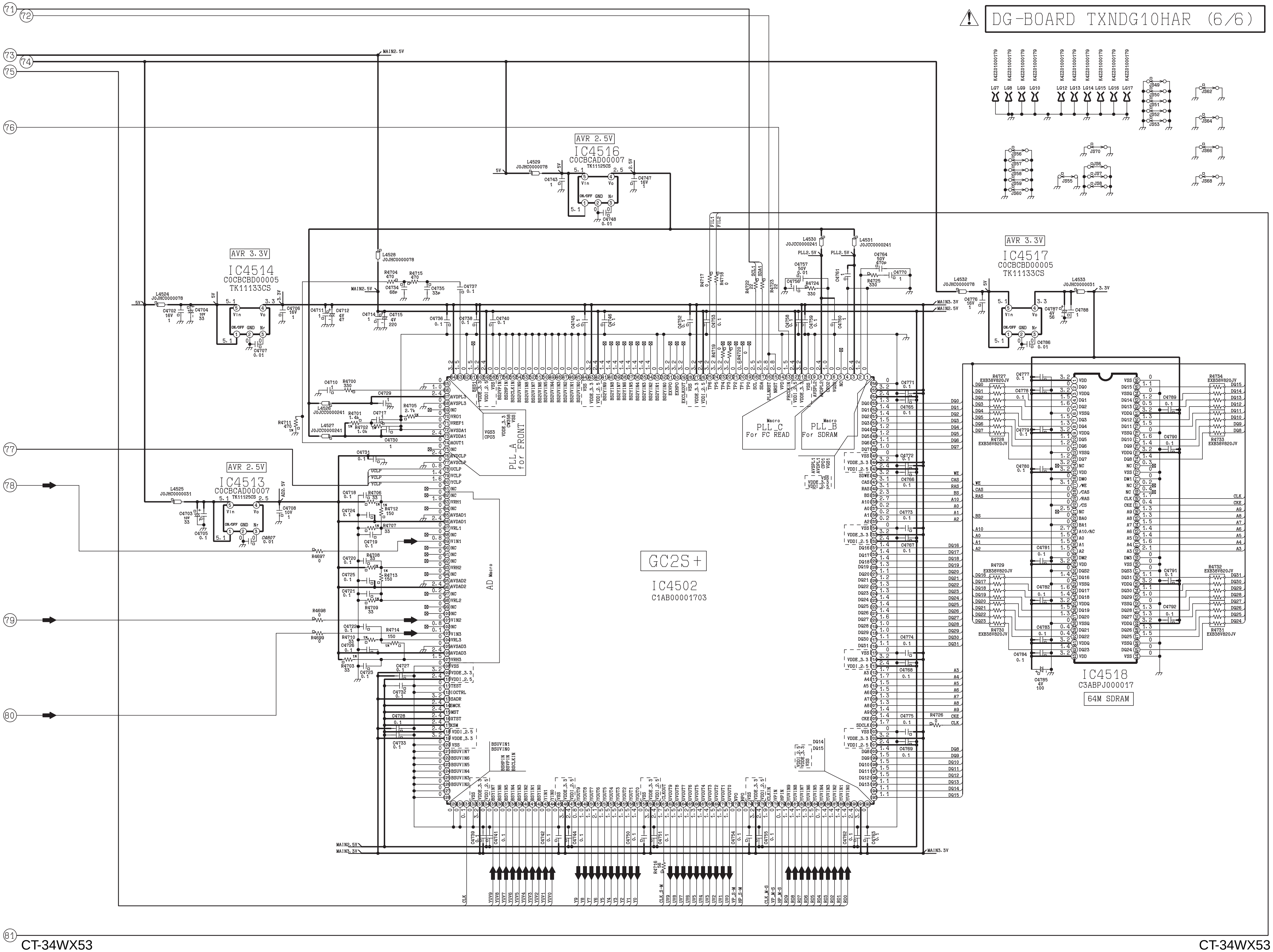
CT-34WX53
DG-Board(4of6)Schematic Diagram

CT-34WX53
DG-Board(4of6)Schematic Diagram

26 27 28 29 30 31 32 33 34

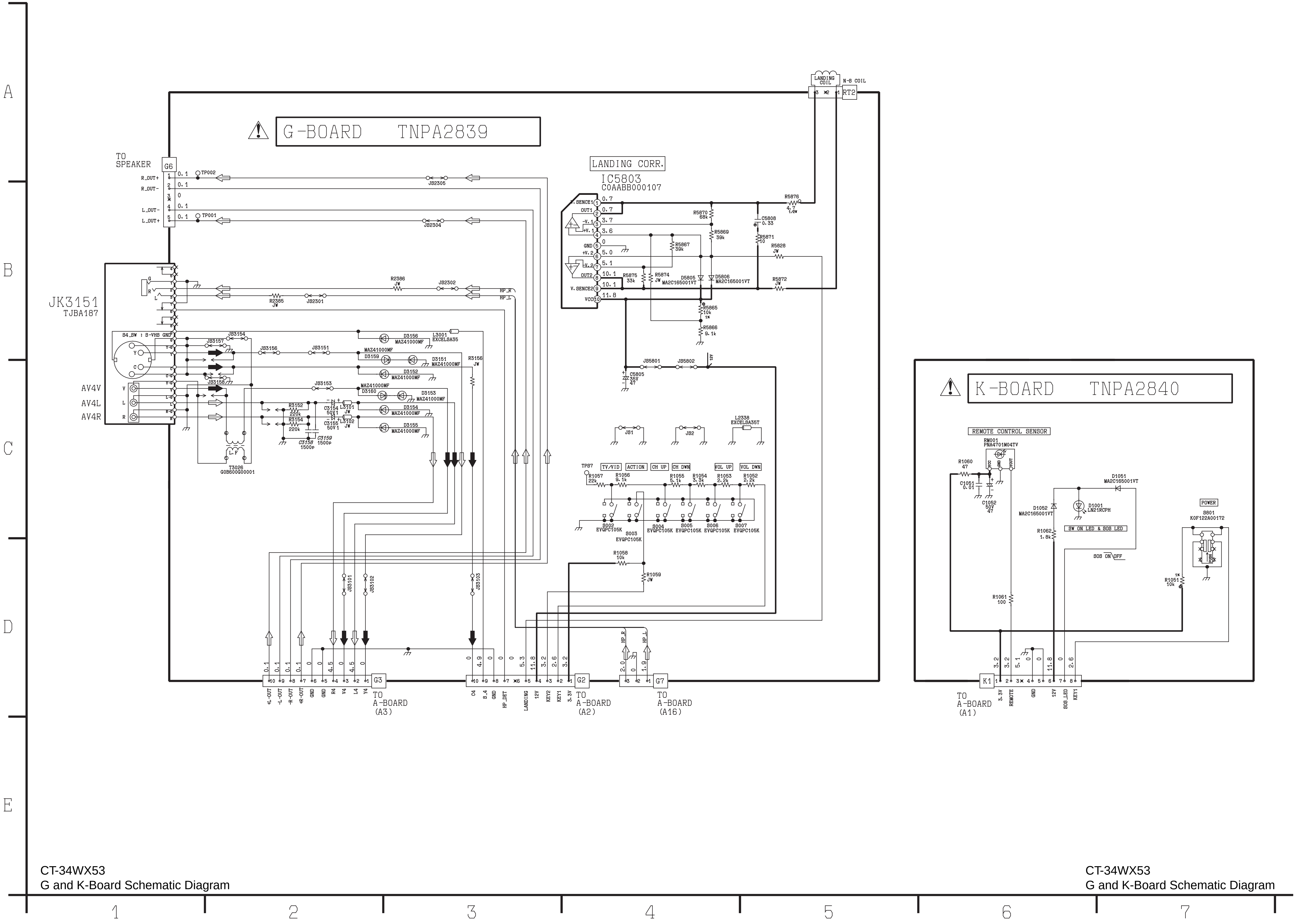

RGB AMP
IC4512
AN15935A-VF
Q4534 XN0560100L
Q4535 XN0560100L
Q4536 XN0560100L
Q4538 2SD0601ARL
Q4539 2SD0601ARL
Q4540 2SD0601ARL
LC4556 J0HABB000004
LC4557 J0HABB000009
LC4558 J0HABB000009
LC4559 J0HABB000009
TO L-BOARD (L1)
DG5
12V
B
GND
R
GND
G
GND
YM
YM_GND
RC
GC
BC
VIDEO_MUTE
D4504 MA3X152K0L
D4503 MA3X152E0L
BLK
HCLP
RDV
BDV
OSDCNT
Rin
COF-R
Gin
COF-G
Bin
COF-B
BLK
CLP
Drv-R
Drv-B
CONTRAST
GND
9v
ROUT
OUTPUT9v
GOUT
BrightS/H
BOUT
SPOTkiller
OSD-Rin
OSD-Gin
OSD-Bin
YS
YM
OSD_R
OSD_G
OSD_B
SPOT
MAIN9V
UCLP
VCLP
YCLP
SUB_PB
PB
SUB_PR
PR
SUB_Y
Y
Q4522 2SD0601ARL
Q4526 2SB0709ARL
Q4531 2SB0709ARL
Q4533 2SD10300TL
Q4523 2SD0601ARL
Q4527 2SB0709ARL
Q4530 2SD10300TL
Q4524 2SD0601ARL
Q4529 2SB0709ARL
Q4532 2SD10300TL
L4520 5.6
L4521 5.6
L4522
L4523

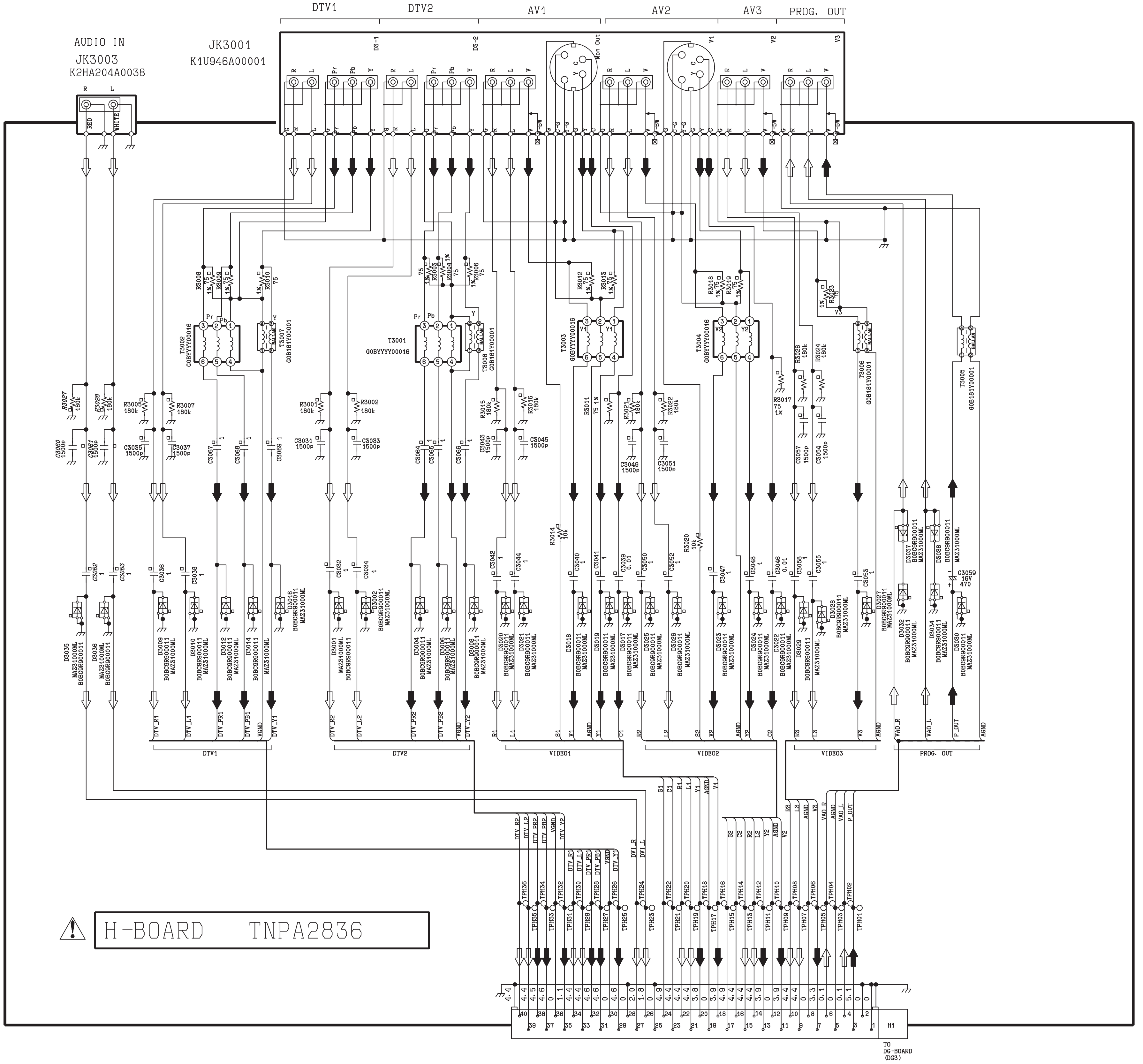
DG-BOARD TXNDG10HAR (5/6)


DG-BOARD TXNDG10HAR (6/6)
AVR 3.3V
IC4514
C0CBCBD00005
TK11133CS
AVR 2.5V
IC4516
C0CBCAD00007
TK11125CS
AVR 2.5V
IC4513
C0CBCAD00007
TK11125CS
AVR 3.3V
IC4517
C0CBCBD00005
TK11133CS
GC2S+
IC4502
C1AB00001703
IC4518
C3ABPJ000017
64M SDRAM
PLL_A for FRONT
PLL_C For FC READ
PLL_B For SDRAM
AD Macro
MAIN2.5V
MAIN3.3V
5V
3.3V
PLL2.5V
71
72
73
74
75
76
77
78
79
80
81

CT-34WX53
DG-Board(6of6)Schematic Diagram

CT-34WX53
DG-Board(6of6)Schematic Diagram

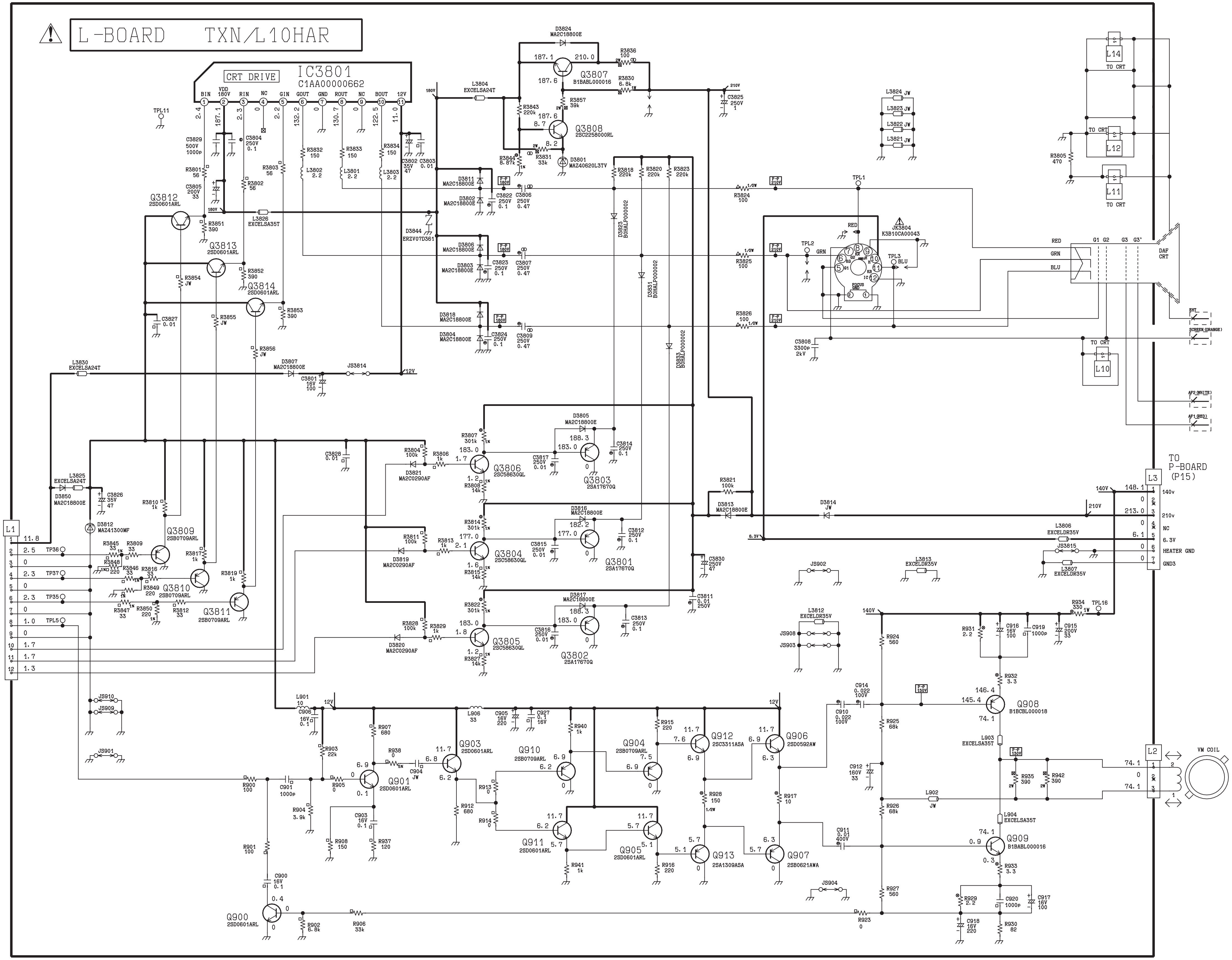

A
B
C
D
E
1
2
3
4
5
6
7
G-BOARD TNPA2839
K-BOARD TNPA2840
TO SPEAKER
G6
R_OUT+
R_OUT-
L_OUT-
L_OUT+
TP002
TP001
JS2305
JS2304
JK3151
TJBA187
R2386
JW
JS2302
R2385
JS2301
HP_R
HP_L
S4_SW : S-VHS GND
JS3157
JS3154
JS3156
JS3151
JS3153
JS3158
D3156
MAZ41000MF
L3001
EXCELSA35
D3159
D3151
MAZ41000MF
R3156
JW
D3152
D3160
D3153
D3154
D3155
AV4V
AV4L
AV4R
R3152
220k
R3154
220k
C3154
50V1
C3155
50V1
L3101
JW
L3102
JW
C3158
1500P
C3159
1500P
T3026
G0B600G00001
L.F
LANDING CORR.
IC5803
C0AABB000107
V.SENCE1
OUT1
GND
OUT2
V.SENCE2
VCC
R5870
68k
R5869
39k
R5867
39k
R5875
33k
R5874
JW
D5805
MA2C165001VT
D5806
MA2C165001VT
R5865
10k
R5866
9.1k
C5808
0.33
R5871
10
R5876
4.7
1/2W
R5828
JW
R5872
JW
LANDING COIL
N-S COIL
RT2
JS5801
JS5802
C5805
35V
47
L2338
EXCELSA35T
JS1
JS2
TP87
TV/VID
ACTION
CH UP
CH DWN
VOL UP
VOL DWN
R1057
22k
R1056
9.1k
R1055
5.1k
R1054
3.3k
R1053
2.2k
R1052
2.2k
S002
EVQPC105K
S003
EVQPC105K
S004
EVQPC105K
S005
EVQPC105K
S006
EVQPC105K
S007
EVQPC105K
R1058
10k
R1059
JW
JS3101
JS3102
JS3103
G3
TO A-BOARD (A3)
+L-OUT
-L-OUT
-R-OUT
+R-OUT
GND
R4
V4
L4
Y4
G2
TO A-BOARD (A2)
C4
S_4
GND
HP_DET
LANDING
12V
KEY2
KEY1
3.3V
G7
TO A-BOARD (A16)
HP_R
HP_L
REMOTE CONTROL SENSOR
RM001
PNA4701M04TV
R1060
47
C1051
0.01
C1052
50V
47
D1051
MA2C165001VT
D1052
MA2C165001VT
D1001
LN21RCPH
SW ON LED & SOS LED
R1062
1.8k
SOS ON/OFF
R1061
100
POWER
S801
K0F122A00172
R1051
10k
K1
TO A-BOARD (A1)
3.3V
REMOTE
GND
12V
SOS_LED
KEY1



AUDIO IN
JK3003
K2HA204A0038
R
L
RED
WHITE
JK3001
K1U946A00001
DTV1
DTV2
AV1
AV2
AV3
PROG. OUT
D3-1
D3-2
Mon Out
V1
V2
V3
Pr
Pb
Y
T3002
G0BYYYY00016
T3007
G0B181Y00001
T3001
G0BYYYY00016
T3008
G0B181Y00001
T3003
G0BYYYY00016
T3004
G0BYYYY00016
T3006
G0B181Y00001
T3005
G0B181Y00001
R3027 180k
R3028 180k
R3005 180k
R3007 180k
R3001 180k
R3002 180k
R3015 180k
R3016 180k
R3011 75 1%
R3021 180k
R3022 180k
R3017 75 1%
R3026 180k
R3024 180k
R3014 10k
R3020 10k
C3060 1500p
C3061 1500p
C3035 1500p
C3037 1500p
C3031 1500p
C3033 1500p
C3043 1500p
C3045 1500p
C3049 1500p
C3051 1500p
C3057 1500p
C3054 1500p
C3059 16V 470
B0BC9R900011
MA231000ML
DTV_R1
DTV_L1
DTV_PR1
DTV_PB1
VGND
DTV_Y1
DTV_R2
DTV_L2
DTV_PR2
DTV_PB2
DTV_Y2
R1
L1
S1
Y1
AGND
C1
R2
L2
S2
Y2
C2
R3
L3
V3
VAO_R
VAO_L
P_OUT
DTV1
DTV2
VIDEO1
VIDEO2
VIDEO3
PROG. OUT
DVI_R
DVI_L
H-BOARD TNPA2836
H1
TO DG-BOARD (DG3)
A
B
C
D
E
1
2
3
4
5
6
7

CT-34WX53
H-Board Schematic Diagram

CT-34WX53
H-Board Schematic Diagram


L-BOARD TXN/L10HAR
IC3801
C1AA00000662
CRT DRIVE
BIN VDD 180V RIN NC GIN GOUT GND ROUT NC BOUT 12V
Q3807 B1BABL000016
Q3808 2SC2258000RL
D3801 MAZ40620L3TY
D3824 MA2C18800E
L3804 EXCELSA24T
Q3812 2SD0601ARL
Q3813 2SD0601ARL
Q3814 2SD0601ARL
L3826 EXCELSA35T
D3844 ERZV07D361
L3830 EXCELSA24T
D3807 MA2C18800E
JS3814
TPL11
TPL1
TPL2
TPL3
JK3804 K3B10CA00043
RED GRN BLU
FOCUS
G1 G2 G3 G3'
DAF CRT
L14 TO CRT
L12 TO CRT
L11 TO CRT
L10 TO CRT
R3805 470
C3808 3300p 2kV
SCREEN (ORANGE)
AF2 (WHITE)
AF1 (RED)
TO DG-BOARD (DG5)
L1
12v B GND R GND G GND VM GND R_CUTOFF G_CUTOFF B_CUTOFF
Q3809 2SB0709ARL
Q3810 2SB0709ARL
Q3811 2SB0709ARL
Q3806 2SC5863OQL
Q3804 2SC5863OQL
Q3805 2SC5863OQL
Q3803 2SA1767OQ
Q3801 2SA1767OQ
Q3802 2SA1767OQ
D3812 MAZ41300MF
D3850 MA2C18800E
L3825 EXCELSA24T
TO P-BOARD (P15)
L3
140v 210v NC 6.3V HEATER GND GND3
L3806 EXCELDR35V
L3807 EXCELDR35V
L3813 EXCELDR35V
L3812 EXCELDR35V
D3813 MA2C18800E
D3814 JW
JS3815 JS902 JS908 JS903 JS904 JS910 JS909 JS901
Q900 2SD0601ARL
Q901 2SD0601ARL
Q903 2SD0601ARL
Q910 2SB0709ARL
Q911 2SD0601ARL
Q904 2SB0709ARL
Q905 2SD0601ARL
Q912 2SC3311ASA
Q913 2SA1309ASA
Q906 2SD0592AW
Q907 2SB0621AWA
Q908 B1BCBL000018
Q909 B1BABL000016
L901 10
L906 33
L903 EXCELSA35T
L904 EXCELSA35T
L902 JW
L2
VM COIL
A B C D E
1 2 3 4 5 6 7

CT-34WX53
L-Board Schematic Diagram

CT-34WX53 L-Board Schematic Diagram

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

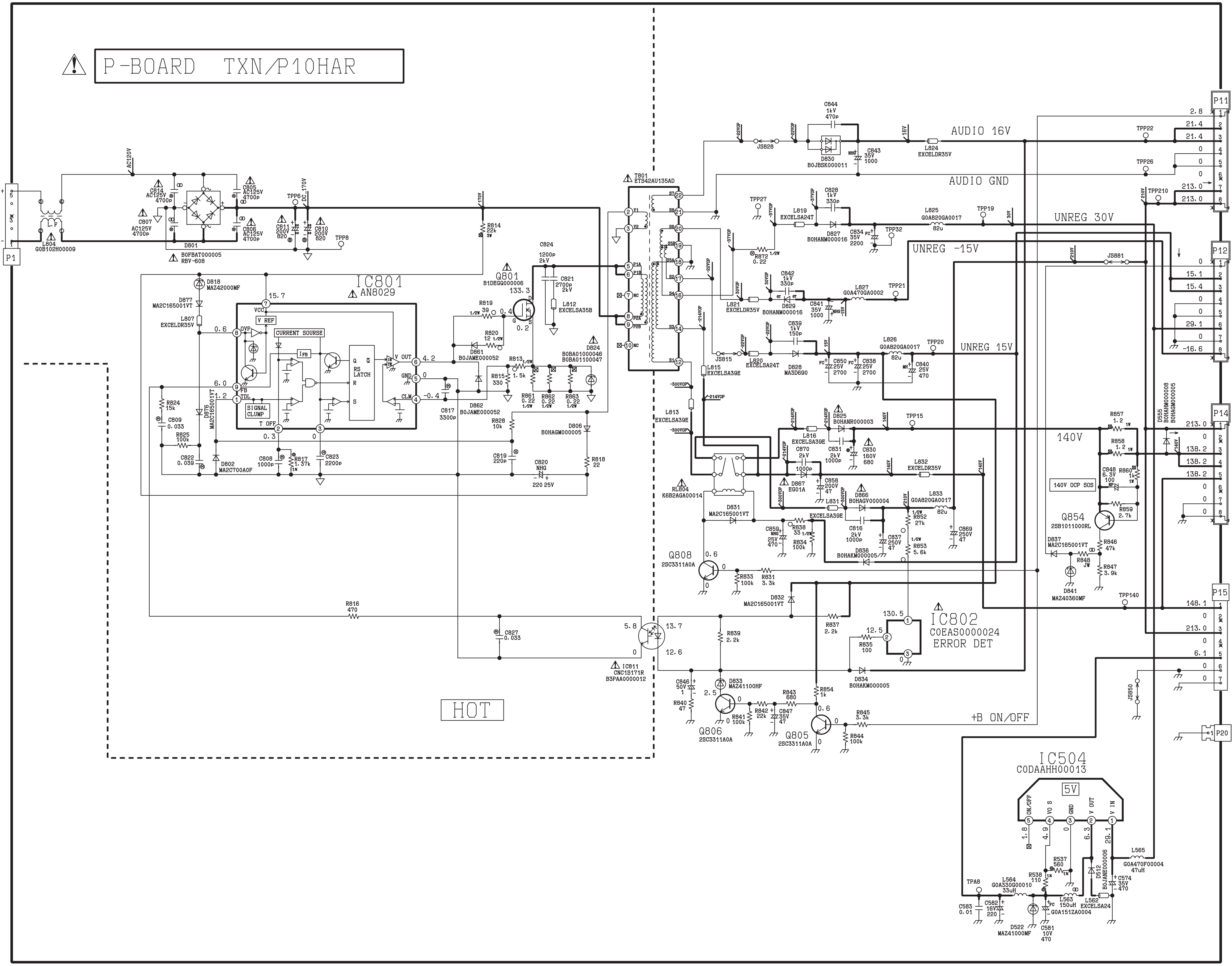
Notes:

1. **Resistor**
   All resistors are cabon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ○ : Nonflammable
   ☒ : Metal Oxide
   △ : Solid
   ◎ : Metal Film
   ◪ : Wire Wound
   ⊗ : Fuse:
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is μF, unless otherwise noted.
   ⊗ : Temperature Compensation
   +⊣⊢ : Electrolytic
   Ⓜ : Polyester
   NP⊣⊢ : Bipolar
   ⓜ : Metalized Polyester
   Ⓣ : Dipped Tantalum
   ☒ : Polypropylene
   Ⓩ : Z-Type
3. Coil
   Unit of inductance is μF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold)
   ▽ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source .... AC 120V, 60Hz
   Receiving Signal .... Colour Bar signal (RF)
   All customer's controls .... Maximum positions
7. Number in red circle indicates waveform nember.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow

9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
     Connect the earth of instruments to the earth connection of the circuit being measured.
   - d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)


P-BOARD TXN/P10HAR
TO A-BOARD (AC2)
P1
AC+
AC-
L804 G0B102H00009
D801 B0FBAT000005 RBV-608
C814 AC125V 4700p
C807 AC125V 4700p
C805 AC125V 4700p
C806 AC125V 4700p
C811 200V 820
C810 200V 820
AC120V
170V
TPP6
TPP8
R814 22k 3W
IC801 AN8029
VCC
V REF
CURRENT SOURSE
OVP
FB
TDL
SIGNAL CLUMP
T OFF
RS LATCH
V OUT
GND
CLM
Q801 B1DEGQ000006
C824 1200p 2kV
C821 2700p 2kV
L812 EXCELSA35B
D824 B0BA01000046 B0BA01100047
D818 MAZ42000MF
D877 MA2C165001VT
L807 EXCELDR35V
R824 15k
C809 0.033
R825 100k
C822 0.039
D802 MA2C700A0F
C808 1000p
R817 1.37k
C823 2200p
C817 3300p
D861 B0JAME000052
D862 B0JAME000052
R815 330
R828 10k
R861 0.22
R862 0.22
R863 0.22
D806 B0HAGW000005
C819 220p
C820 NHG 220 25V
R818 22
R816 470
C827 0.033
IC811 CNC1S171R B3PAA0000012
HOT
T801 ETS42AU135AD
C844 1kV 470p
D830 B0JBSK000011
C843 35V 1000
L824 EXCELDR35V
JS828
AUDIO 16V
AUDIO GND
UNREG 30V
UNREG -15V
UNREG 15V
140V
+B ON/OFF
C826 1kV 330p
L819 EXCELSA24T
D827 B0HANM000016
C834 35V 2200
TPP27
TPP32
TPP19
L825 G0A820GA0017 82u
R872 0.22
C842 1kV 330p
D829 B0HANM000016
C841 35V 1000
L827 G0A470GA0002
TPP21
L821 EXCELDR35V
C839 1kV 150p
D828 MA3D690
C850 25V 2700
C838 25V 2700
L826 G0A820GA0017 82u
C840 25V 470
TPP20
L820 EXCELSA24T
JS815
L815 EXCELSA39E
L813 EXCELSA39E
RL804 K6B2AGA00014
L816 EXCELSA39E
D825 B0HANR000003
C870 2kV 1000p
C831 2kV 1000p
C830 160V 680
D867 EG01A
C858 200V 47
L832 EXCELDR35V
TPP15
L831 EXCELSA39E
D866 B0HAGV000004
L833 G0A820GA0017 82u
D831 MA2C165001VT
C859 NHG 25V 470
R838 33
R834 100k
C816 2kV 1000p
D836 B0HAKM000005
C837 250V 47
R852 27k
R853 5.6k
C869 250V 47
Q808 2SC3311A0A
R833 100k
R831 3.3k
D832 MA2C165001VT
R837 2.2k
R839 2.2k
IC802 C0EAS0000024 ERROR DET
R835 100
D834 B0HAKM000005
C846 50V 1
R840 47
D833 MAZ41100HF
Q806 2SC3311A0A
R841 100k
R842 22k
R843 680
C847 35V 47
R854 1k
Q805 2SC3311A0A
R845 3.3k
R844 100k
JS881
JS850
R857 1.2
R858 1.2
D555 B0HAHM000008 B0HAGM000005
C848 6.3V 100
R860 1k
140V OCP SOS
Q854 2SB1011000RL
R859 2.7k
D837 MA2C165001VT
R848 JW
R846 47k
R847 3.9k
D841 MAZ40360MF
TPP22
TPP26
TPP210
TPP140
TO D-BOARD (D11)
P11
+B ON OFF
AUDIO +16V
AUDIO GND
210V (H)
TO D-BOARD (D12)
P12
SOS
UNREG +15V
GND
UNREG +30V
UNREG -15V
TO D-BOARD (D14)
P14
210V (ABL)
140V (EHT)
140V (DAF)
TO L-BOARD (L3)
P15
140V (VM)
210V (CRT DRIVE)
HEATER
P20
IC504 C0DAAHH00013
5V
ON/OFF
VO S
V OUT
V IN
R537 560
R538 110
L564 G0A330G00010 33uH
L563 150uH G0A151ZA0004
L562 EXCELSA24
L565 G0A470F00004 47uH
D512 B0JANE000006
C574 35V 470
C583 0.01
C582 16V 220
D522 MAZ41000MF
C581 10V 470
TPA8
A
B
C
D
E
1
2
3
4
5
6
7

CT-34WX53
P-Board Schematic Diagram

10 Schematic Diagrams

10.1. Schematic Diagram Notice

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

Notes:

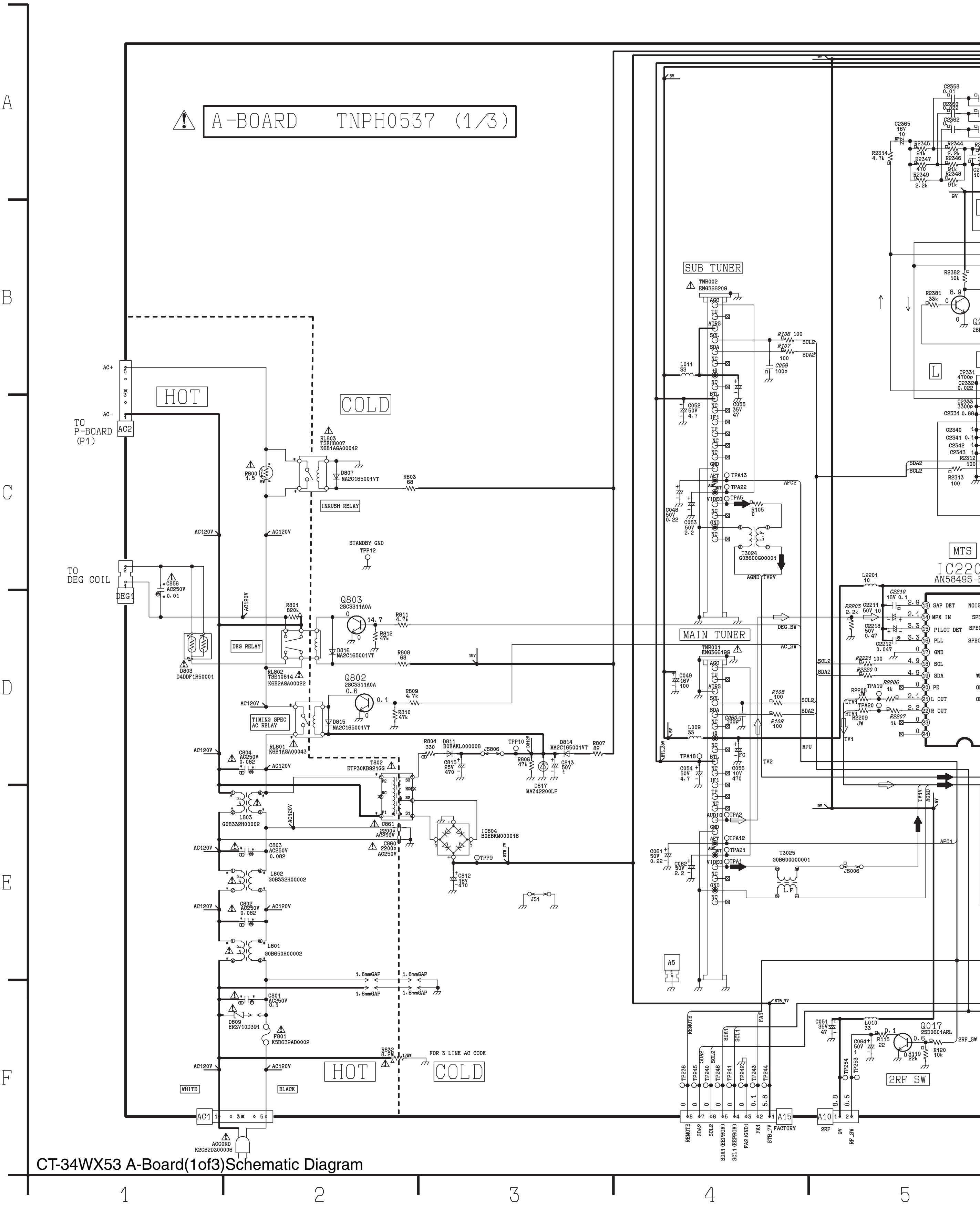
1. **Resistor**
   All resistors are cabon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ○ : Nonflammable ⊠ : Metal Oxide
   △ : Solid ◎ : Metal Film
   ⧄ : Wire Wound ⊗ : Fuse**:**
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is µF, unless otherwise noted.
   ⊗ : Temperature Compensation +┤├ : Electrolytic
   Ⓜ : Polyester NP┤├ : Bipolar
   ⓜ : Metalized Polyester Ⓣ : Dipped Tantalum
   ⊠ : Polypropylene Ⓩ : Z-Type
3. Coil
   Unit of inductance is µF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ▽ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source .... AC 120V, 60Hz
   Receiving Signal .... Colour Bar signal (RF)
   All customer's controls .... Maximum positions
7. Number in red circle indicates waveform nember.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow

9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

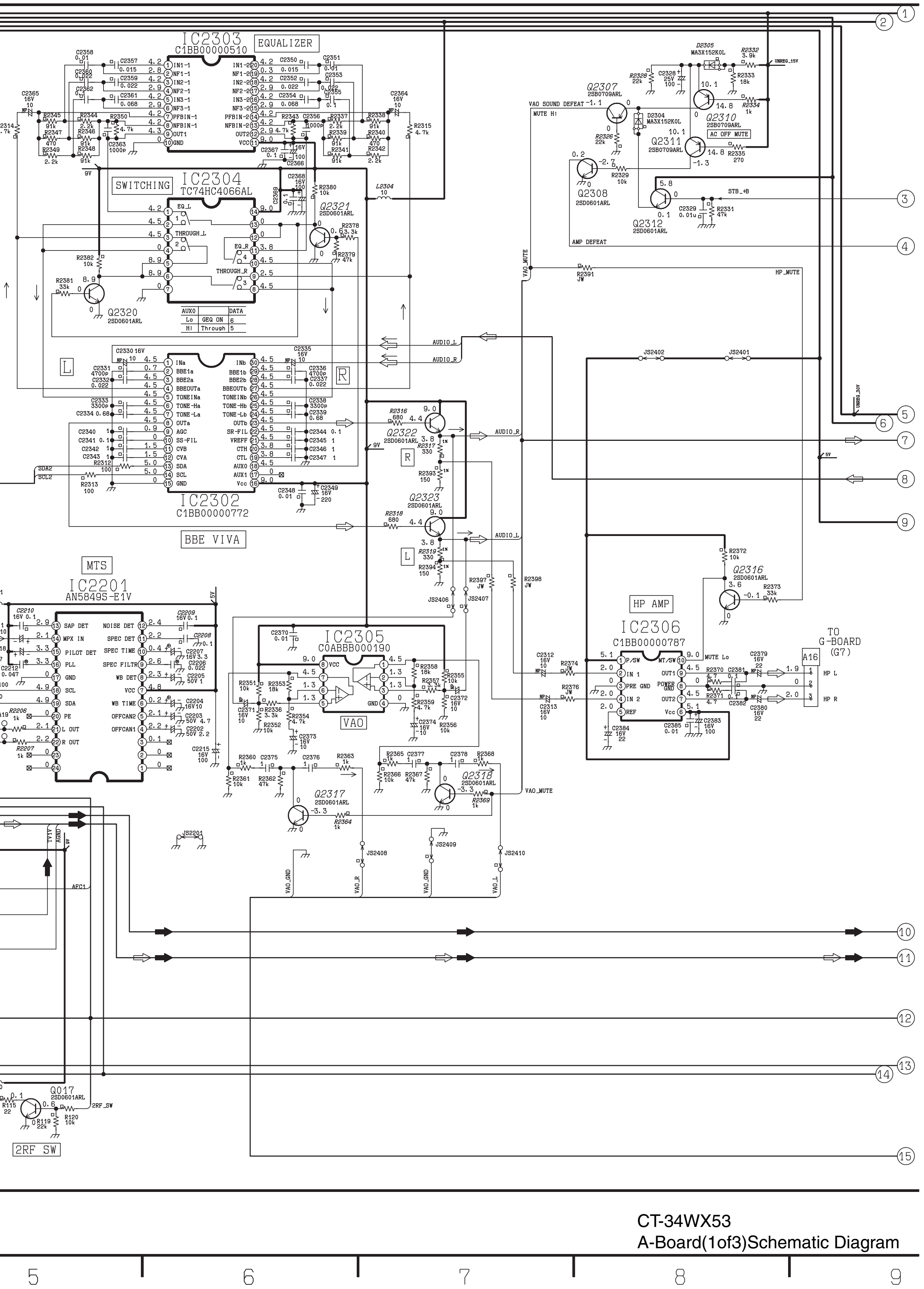
Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
     Connect the earth of instruments to the earth connection of the circuit being measured.
   - d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)

10.2. A-Board (1 of 3) Schematic Diagram

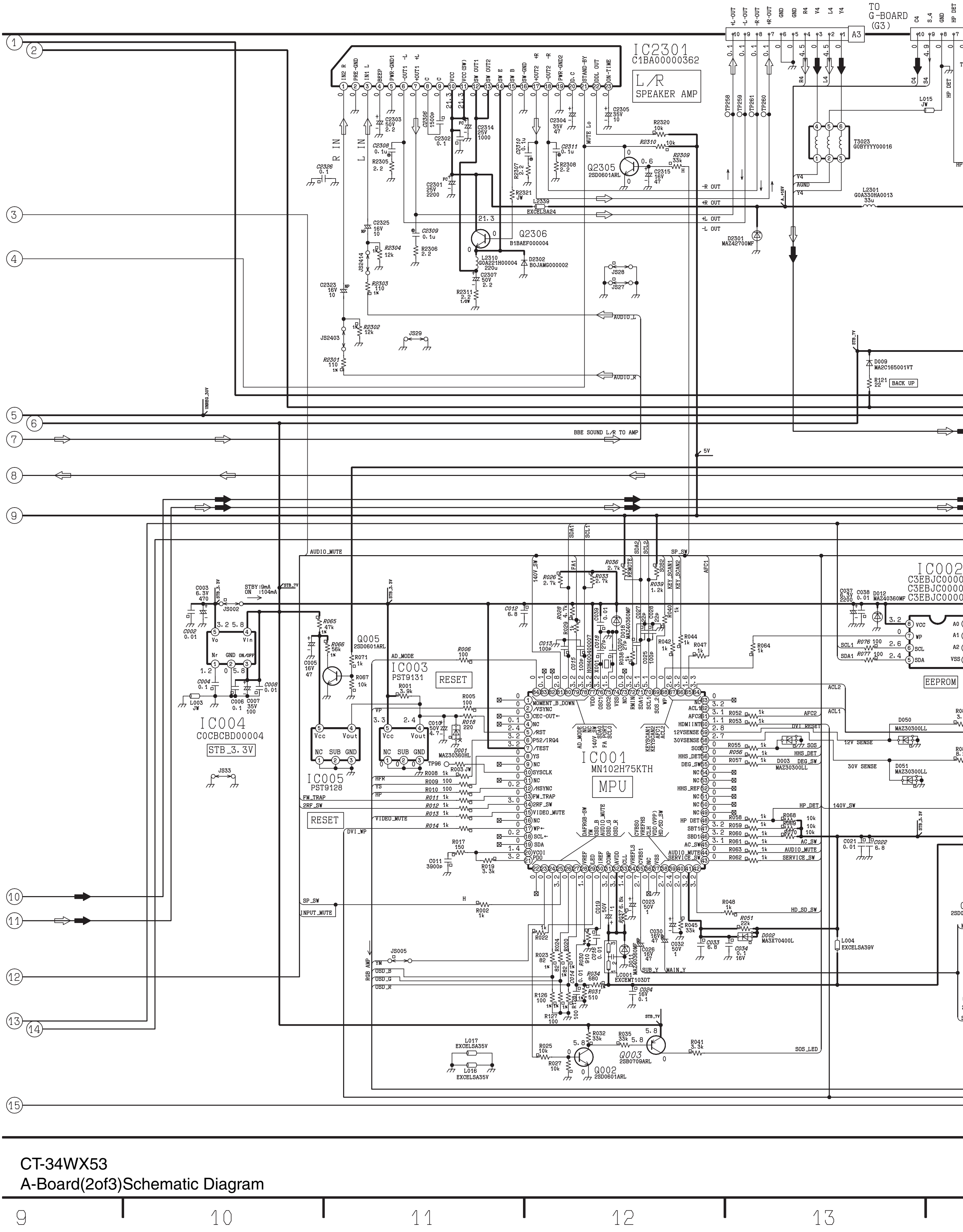

A-BOARD TNPH0537 (1/3)
HOT
COLD
TO P-BOARD (P1)
AC2
AC+
AC-
TO DEG COIL
DEG1
RL803 TSE8007 K6B1AGA00042
R800 1.5
D807 MA2C165001VT
R803 68
INRUSH RELAY
STANDBY GND TPP12
AC120V
C856 AC250V 0.01
Q803 2SC3311A0A
R801 820k
R811 4.7k
R812 47k
DEG RELAY
D816 MA2C165001VT
R808 68
15V
D803 D4DDF1R50001
RL802 TSE10814 K6B2AGA00022
Q802 2SC3311A0A
R809 4.7k
R810 47k
TIMING SPEC AC RELAY
D815 MA2C165001VT
RL801 K6B1AGA00043
C804 AC250V 0.082
T802 ETP30KB921GG
R804 330
D811 B0EAKL000008
JS806
TPP10
D814 MA2C165001VT
R807 82
C815 25V 470
R806 47k
C813 50V 1
D817 MAZ42200LF
L803 G0B332H00002
C861 2200p AC250V
C860 2200p AC250V
IC804 B0EBKM000016
C803 AC250V 0.082
TPP9
STB_TV
L802 G0B332H00002
C812 16V 470
JS1
C802 AC250V 0.082
L801 G0B650H00002
1.6mmGAP
C801 AC250V 0.1
D809 ERZV10D391
F801 K5D632AD0002
R832 8.2M
FOR 3 LINE AC CODE
HOT
COLD
WHITE
BLACK
AC1
ACCORD K2CB2DZ00006
SUB TUNER
TNR002 ENG36620G
R106 100
R107 100
SCL2
SDA2
C059 100p
L011 33
C052 50V 4.7
C055 35V 47
TPA13
TPA22
AFC2
TPA5
R105 0
C048 50V 0.22
C053 50V 2.2
T3024 G0B600G00001
AGND
TV2V
MAIN TUNER
TNR001 ENG36619G
DEG_SW
AC_SW
C049 16V 100
R108 100
R109 100
C060 100p
L009 33
TPA18
C054 50V 4.7
C056 10V 470
TV2
MPU
TPA2
TPA12
TPA21
TPA1
C061 50V 0.22
C062 50V 2.2
T3025 G0B600G00001
JS006
A5
STB_TV
C051 35V 47
L010 33
Q017 2SD0601ARL
C064 50V 1
R115 22
R119 22k
R120 10k
2RF_SW
2RF SW
TP238 TP245 TP240 TP246 TP241 TP242 TP243 TP244
A15
REMOTE SDA2 SCL2 SDA1 (EEPROM) SCL1 (EEPROM) FA2 (GND) FA1 STB_TV
FACTORY
TP254 TP253
A10
2RF 9V RF_SW
C2358 0.01
C2360
C2362
C2365 16V 10
R2314 4.7k
R2345 91k
R2344 2.2k
R2347 470
R2346 91k
R2349 2.2k
R2348 91k
9V
R2382 10k
R2381 33k
8.9
C2331 4700p
C2332 0.022
C2333 3300p
C2334 0.68
C2340
C2341 0.1
C2342
C2343
R2312 100
R2313 100
SDA2
SCL2
MTS
IC220
AN5849S
L2201 10
C2210 16V 0.1
R2203 2.2k
C2211 50V 10
C2218 50V 0.47
C2212 0.047
SAP DET
MPX IN
PILOT DET
PLL
GND
SCL
SDA
PE
L OUT
R OUT
R2221 100
R2220 0
R2206 1k
R2208 JW
TPA19
TPA20
R2209 JW
R2207 1k
LTV1
RTV1
TV1
AFC1
A B C D E F
1 2 3 4 5

CT-34WX53 A-Board(1of3)Schematic Diagram

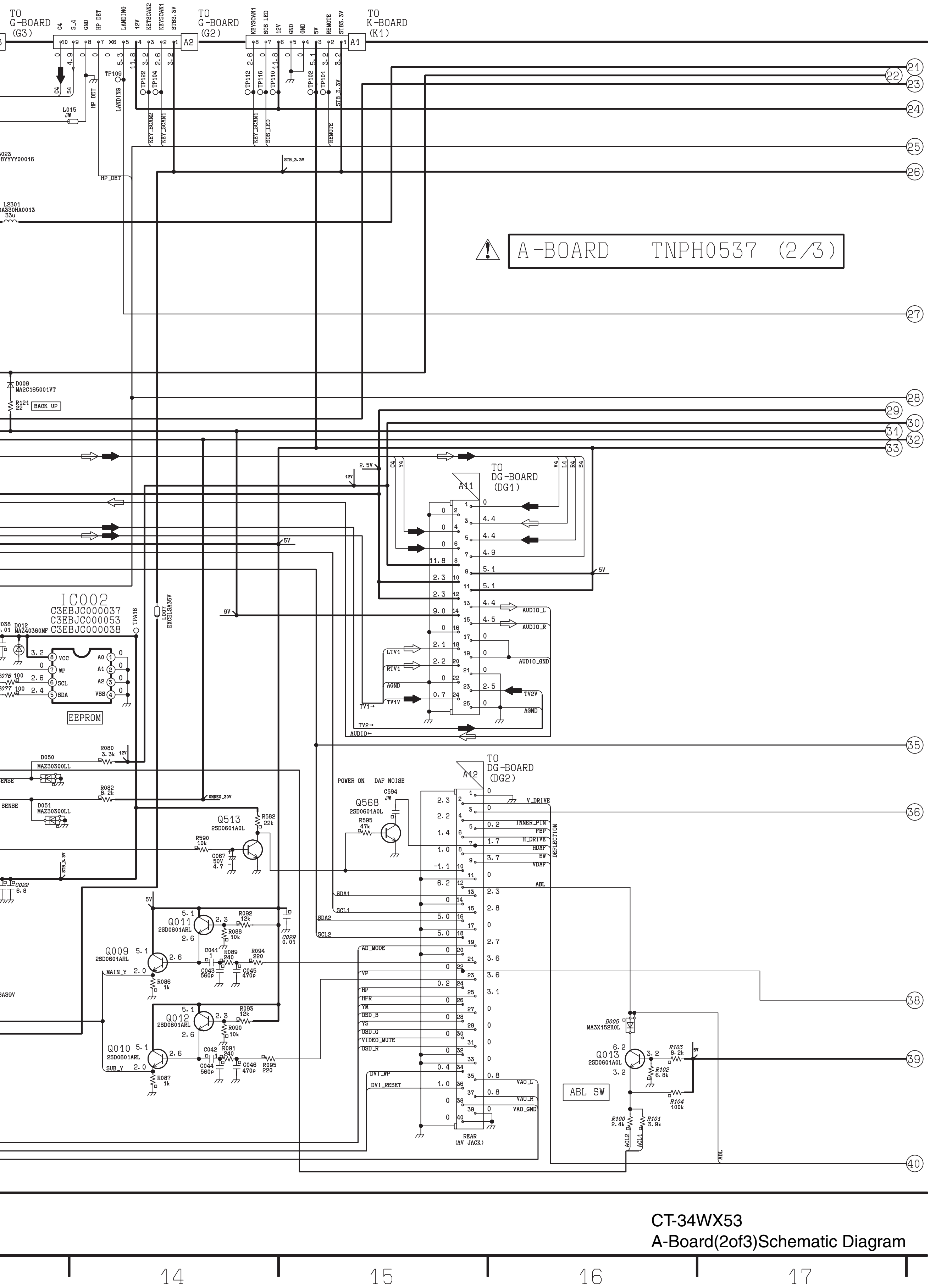

IC2303
C1BB00000510
EQUALIZER
IC2304
TC74HC4066AL
SWITCHING
IC2302
C1BB00000772
BBE VIVA
IC2201
AN5849S-E1V
MTS
IC2305
C0ABBB000190
VAO
IC2306
C1BB00000787
HP AMP
TO
G-BOARD
(G7)
A16
HP L
HP R
Q2307
2SB0709ARL
Q2310
2SB0709ARL
Q2311
2SB0709ARL
Q2308
2SD0601ARL
Q2312
2SD0601ARL
Q2320
2SD0601ARL
Q2321
2SD0601ARL
Q2322
2SD0601ARL
Q2323
2SD0601ARL
Q2316
2SD0601ARL
Q2317
2SD0601ARL
Q2318
2SD0601ARL
Q017
2SD0601ARL
2RF SW
VAO SOUND DEFEAT
MUTE H:
AC OFF MUTE
AMP DEFEAT
STB_+B
UNREG_15V
UNREG_30V
VAO_MUTE
HP_MUTE
AUDIO_L
AUDIO_R
VAO_GND
VAO_R
VAO_L
2RF_SW
AFC1
SDA2
SCL2
5
6
7
8
9

CT-34WX53
A-Board(1of3)Schematic Diagram

10.3. A-Board (2 of 3) Schematic Diagram

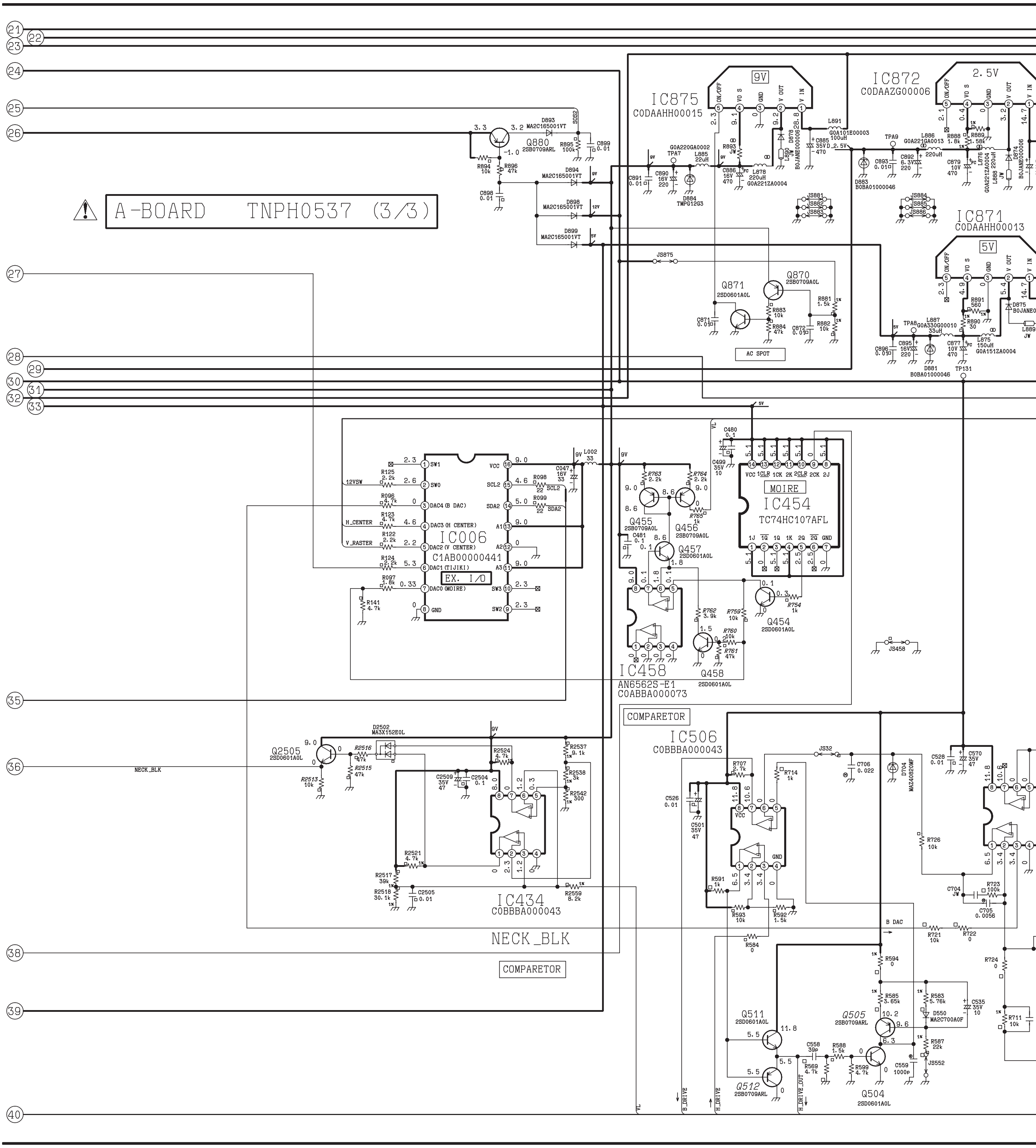

IC2301
C1BA00000362
L/R
SPEAKER AMP
Q2305
2SD0601ARL
Q2306
B1BAEF000004
TO
G-BOARD
(G3)
A3
T3023
G0BYYYY00016
L2301
G0A330HA0013
D2301
MAZ42700MF
D2302
B0JAMG000002
L2310
G0A221H00004
AUDIO_L
AUDIO_R
BBE SOUND L/R TO AMP
D009
MA2C165001VT
BACK UP
IC002
C3EBJC0000
EEPROM
IC004
C0CBCBD00004
STB_3.3V
IC005
PST9128
RESET
IC003
PST9131
RESET
Q005
2SD0601ARL
IC001
MN102H75KTH
MPU
AUDIO_MUTE
SP_SW
INPUT_MUTE
VIDEO_MUTE
DVI_WP
RGB AMP
D002
MA3X70400L
L004
EXCELSA39V
L001
EXCEMT103DT
Q002
2SD0601ARL
Q003
2SB0709ARL
L017
EXCELSA35V
L016
EXCELSA35V
SOS_LED
HD_SD_SW
D050
MA2J0300LL
D051
MA2J0300LL
D003
MA2J0300LL
12V SENSE
30V SENSE
140V_SW
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
9
10
11
12
13

CT-34WX53
A-Board(2of3)Schematic Diagram


TO G-BOARD (G3)
TO G-BOARD (G2)
TO K-BOARD (K1)
A2
A1
C4
S_4
GND
HP DET
LANDING
12V
KEYSCAN2
KEYSCAN1
STB3.3V
SOS LED
5V
REMOTE
TP109
TP122
TP104
TP112
TP116
TP110
TP102
TP101
L015 JW
KEY_SCAN2
KEY_SCAN1
SOS_LED
STB_3.3V
HP_DET
L2301 33u
A-BOARD TNPH0537 (2/3)
D009 MA2C165001VT
R121 22
BACK UP
TO DG-BOARD (DG1)
A11
AUDIO_L
AUDIO_R
AUDIO_GND
LTV1
RTV1
AGND
TV1V
TV2V
TV1→
TV2→
AUDIO←
IC002
C3EBJC000037
C3EBJC000053
C3EBJC000038
TPA16
L007 EXCELSA35V
D012 MAZ40360MF
VCC
WP
SCL
SDA
A0
A1
A2
VSS
EEPROM
R080 3.3k
D050 MAZ30300LL
D051 MAZ30300LL
R082 8.2k
UNREG_30V
Q513 2SD0601A0L
R582 22k
R590 10k
C067 50V 4.7
TO DG-BOARD (DG2)
A12
POWER ON
DAF NOISE
Q568 2SD0601A0L
C594 JW
R595 47k
V_DRIVE
INNER_PIN
FBP
H_DRIVE
HDAF
EW
VDAF
DEFLECTION
ABL
SDA1
SCL1
SDA2
SCL2
AD_MODE
VP
HP
HFR
YM
OSD_B
YS
OSD_G
VIDEO_MUTE
OSD_R
DVI_WP
DVI_RESET
VAO_L
VAO_R
VAO_GND
REAR (AV JACK)
Q011 2SD0601ARL
Q009 2SD0601ARL
Q012 2SD0601ARL
Q010 2SD0601ARL
MAIN_Y
SUB_Y
R092 12k
R088 10k
C029 0.01
C041 1
R089 240
R094 220
C043 560p
C045 470p
R086 1k
R093 12k
R090 10k
C042 1
R091 240
C044 560p
C046 470p
R095 220
R087 1k
D005 MA3X152K0L
Q013 2SD0601A0L
R103 8.2k
R102 6.8k
R104 100k
R100 2.4k
R101 3.9k
ACL2
ACL1
ABL SW
21
22
23
24
25
26
27
28
29
30
31
32
33
35
36
38
39
40
14
15
16
17

CT-34WX53
A-Board(2of3)Schematic Diagram

10.4. A-Board (3 of 3) Schematic Diagram

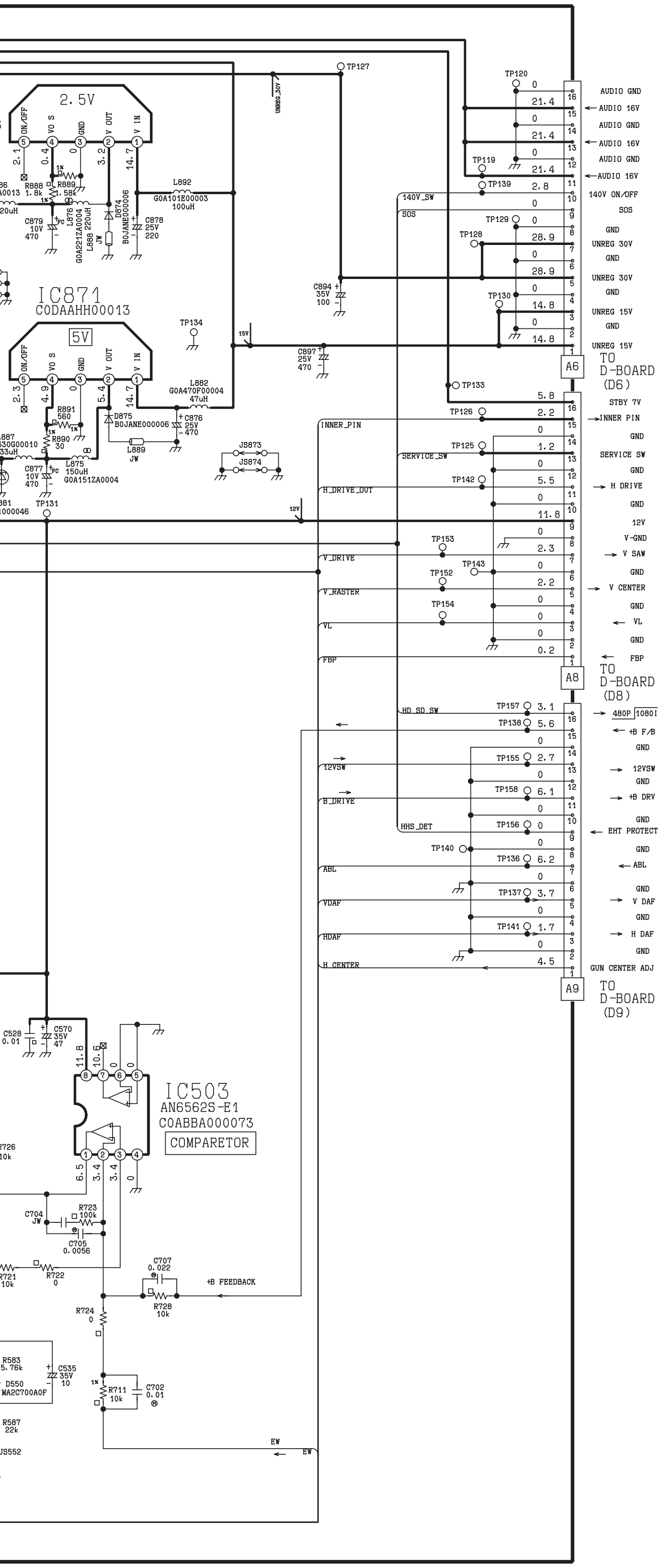


A-BOARD TNPH0537 (3/3)
IC875
C0DAAHH00015
9V
IC872
C0DAAZG00006
2.5V
IC871
C0DAAHH00013
5V
ON/OFF
VO S
GND
V OUT
V IN
Q880
2SB0709ARL
D893
MA2C165001VT
D894
MA2C165001VT
D898
MA2C165001VT
D899
MA2C165001VT
R894 10k
R896 47k
R895 100k
C899 0.01
C898 0.01
TPA7
L885 22uH
G0A220GA0002
R893 JW
C886 16V 470
L878 220uH
G0A221ZA0004
C890 16V 220
C891 0.01
D884 TMPG12G3
D878 B0JANE000006
L891 G0A101E00003 100uH
C885 35V 470
TPA9
L886 G0A221GA0013 220uH
R888 1.8k
R889 1.58k
C893 0.01
C892 6.3V 220
C879 10V 470
D883 B0BA01000046
L876 G0A221ZA0004 220uH
L888 JW
D874 B0JANE000006
JS881
JS882
JS883
JS884
JS885
JS886
JS875
Q871
2SD0601A0L
Q870
2SB0709A0L
R881 1.5k
R883 10k
R884 47k
R882 10k
C871 0.01
C872 0.01
AC SPOT
TPA8
L887 G0A330G00010 33uH
R890 30
R891 560
D875 B0JANE0
L889 JW
C895 16V 220
C896 0.01
C877 10V 470
L875 150uH G0A151ZA0004
D881 B0BA01000046
TP131
IC006
C1AB00000441
EX. I/O
SW1
SW0
DAC4 (B DAC)
DAC3 (H CENTER)
DAC2 (V CENTER)
DAC1 (TIJIKI)
DAC0 (MOIRE)
GND
VCC
SCL2
SDA2
A1
A2
A3
SW3
SW2
12VSW
H_CENTER
V_RASTER
R125 2.2k
R096 4.7k
R123 4.7k
R122 2.2k
R124 2.2k
R097 1.8k
R141 4.7k
R098 22
R099 22
C047 16V 33
L002 33
R763 2.2k
R764 2.2k
R765 1k
Q455
2SB0709A0L
Q456
2SB0709A0L
Q457
2SD0601A0L
C481 0.1
C480 0.1
C499 35V 10
MOIRE
IC454
TC74HC107AFL
VCC 1CLR 1CK 2K 2CLR 2CK 2J
1J 1Q 1Q 1K 2Q 2Q GND
Q454
2SD0601A0L
R754 1k
R762 3.9k
R759 10k
R760 20k
R761 47k
Q458
2SD0601A0L
IC458
AN6562S-E1
C0ABBA000073
JS458
COMPARETOR
IC506
C0BBBA000043
Q2505
2SD0601A0L
D2502
MA3X152E0L
R2516 47k
R2515 47k
R2513 10k
R2524 4.7k
C2509 35V 47
C2504 0.1
R2537 9.1k
R2538 3k
R2542 300
R2521 4.7k
R2517 39k
R2518 30.1k
C2505 0.01
R2559 8.2k
IC434
C0BBBA000043
NECK_BLK
COMPARETOR
R707 2.7k
R714 1k
JS32
C706 0.022
D704 MAZ40820MF
C528 0.01
C570 35V 47
C526 0.01
C501 35V 47
R591 1k
R593 10k
R592 1.5k
R584 0
R726 10k
C704 JW
R723 100k
C705 0.0056
B DAC
R721 10k
R722 0
R594 0
R724 0
R585 3.65k
R583 5.76k
C535 35V 10
D550 MA2C700A0F
R711 10k
Q511
2SD0601A0L
Q505
2SB0709ARL
R587 22k
JS552
C558 39p
R588 1.5k
R569 4.7k
R599 4.7k
C559 1000p
Q512
2SB0709ARL
Q504
2SD0601A0L
B_DRIVE
H_DRIVE
H_DRIVE_OUT
VL
21
22
23
24
25
26
27
28
29
30
31
32
33
35
36
38
39
40

CT-34WX53

A-Board(3of3)Schematic Diagram

18 19 20 21 22

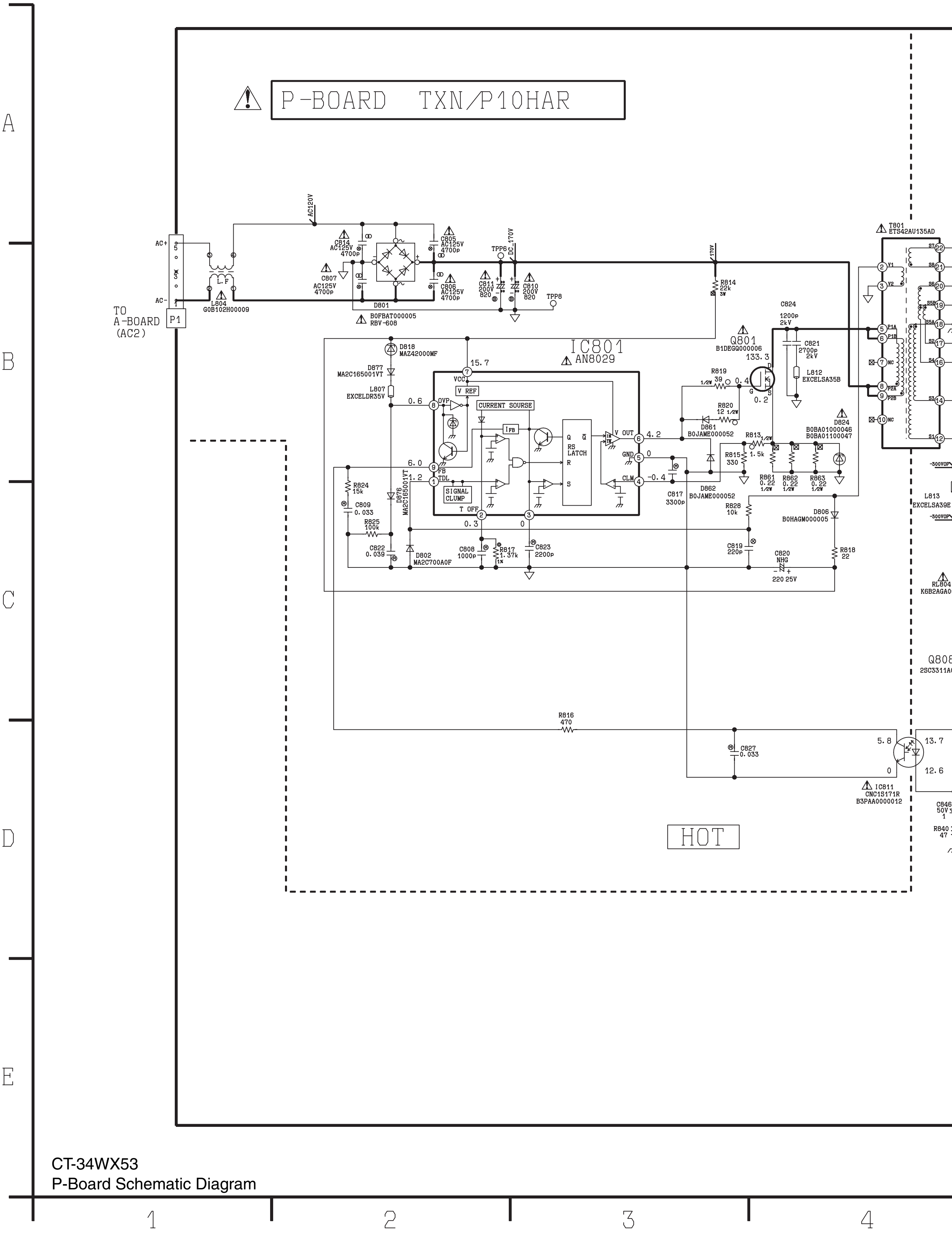

IC871
C0DAAHH00013
2.5V
5V
ON/OFF
VO S
GND
V OUT
V IN
L892
G0A101E00003
100uH
L882
G0A470F00004
47uH
D874
B0JANE000006
D875
B0JANE000006
C878 25V 220
C876 25V 470
C879 10V 470
C877 10V 470
C894 35V 100
C897 25V 470
R888 1.8k
R889 1.58k
R891 560
R890 30
L876 G0A221ZA0004
L888 220uH JW
L875 150uH G0A151ZA0004
L889 JW
JS873
JS874
UNREG 30V
15V
12V
TP127
TP120
TP119
TP139
TP129
TP128
TP130
TP134
TP133
TP126
TP125
TP142
TP131
TP153
TP143
TP152
TP154
TP157
TP138
TP155
TP158
TP156
TP140
TP136
TP137
TP141
140V_SW
SOS
INNER_PIN
SERVICE_SW
H_DRIVE_OUT
V_DRIVE
V_RASTER
VL
FBP
HD SD SW
12VSW
B_DRIVE
HHS_DET
ABL
VDAF
HDAF
H_CENTER
AUDIO GND
AUDIO 16V
140V ON/OFF
GND
UNREG 15V
STBY 7V
INNER PIN
SERVICE SW
H DRIVE
V-GND
V SAW
V CENTER
480P 1080I
+B F/B
EHT PROTECT
V DAF
H DAF
GUN CENTER ADJ
A6
TO D-BOARD (D6)
A8
TO D-BOARD (D8)
A9
TO D-BOARD (D9)
IC503
AN6562S-E1
C0ABBA000073
COMPARETOR
C528 0.01
C570 35V 47
C704 JW
R723 100k
C705 0.0056
C707 0.022
R728 10k
R721 10k
R722 0
R724 0
+B FEEDBACK
R711 10k
C702 0.01
R583 5.76k
C535 35V 10
D550 MA2C700A0F
R587 22k
JS552
EW

CT-34WX53

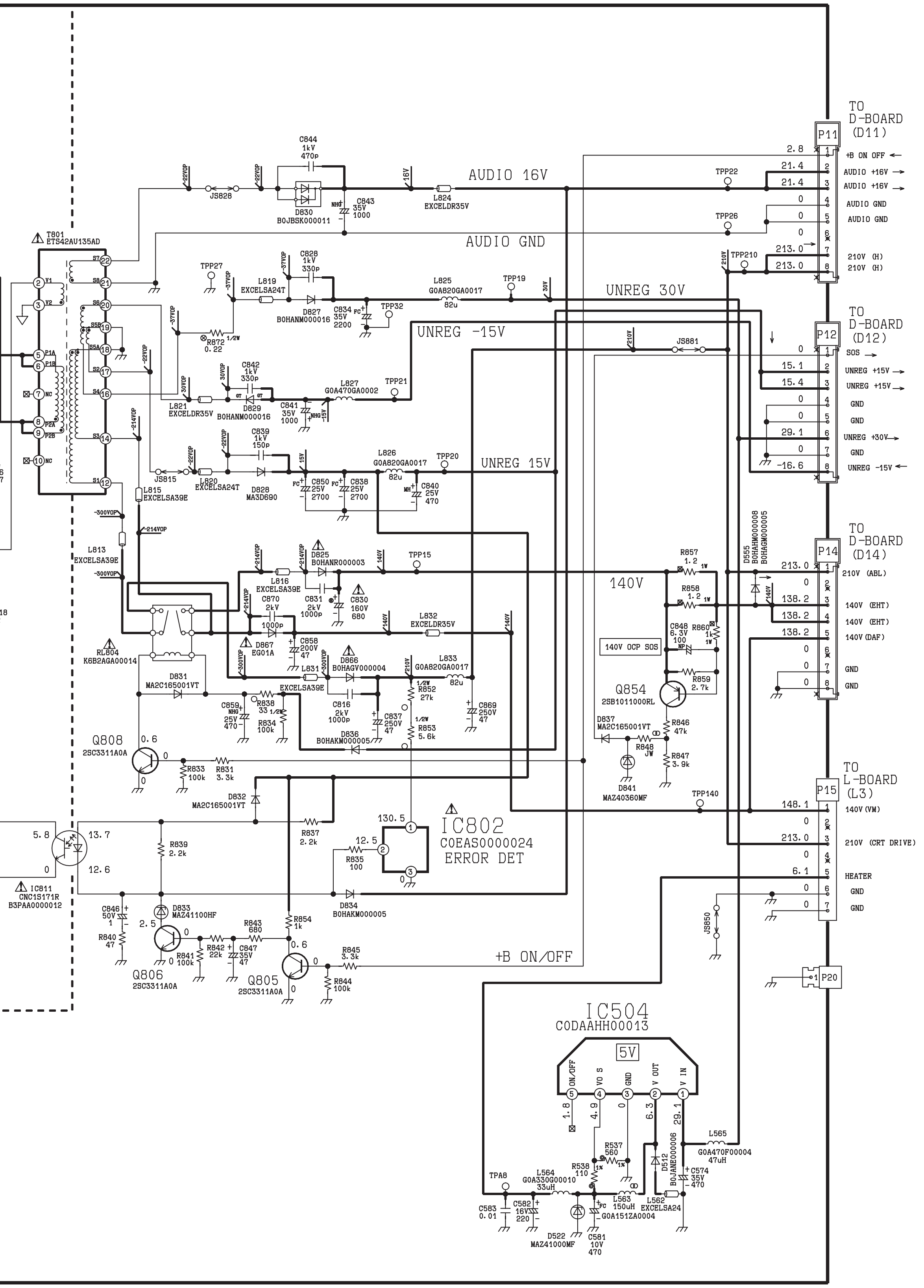
A-Board(3of3)Schematic Diagram

22 23 24 25 26

10.5. P-Board Schematic Diagram

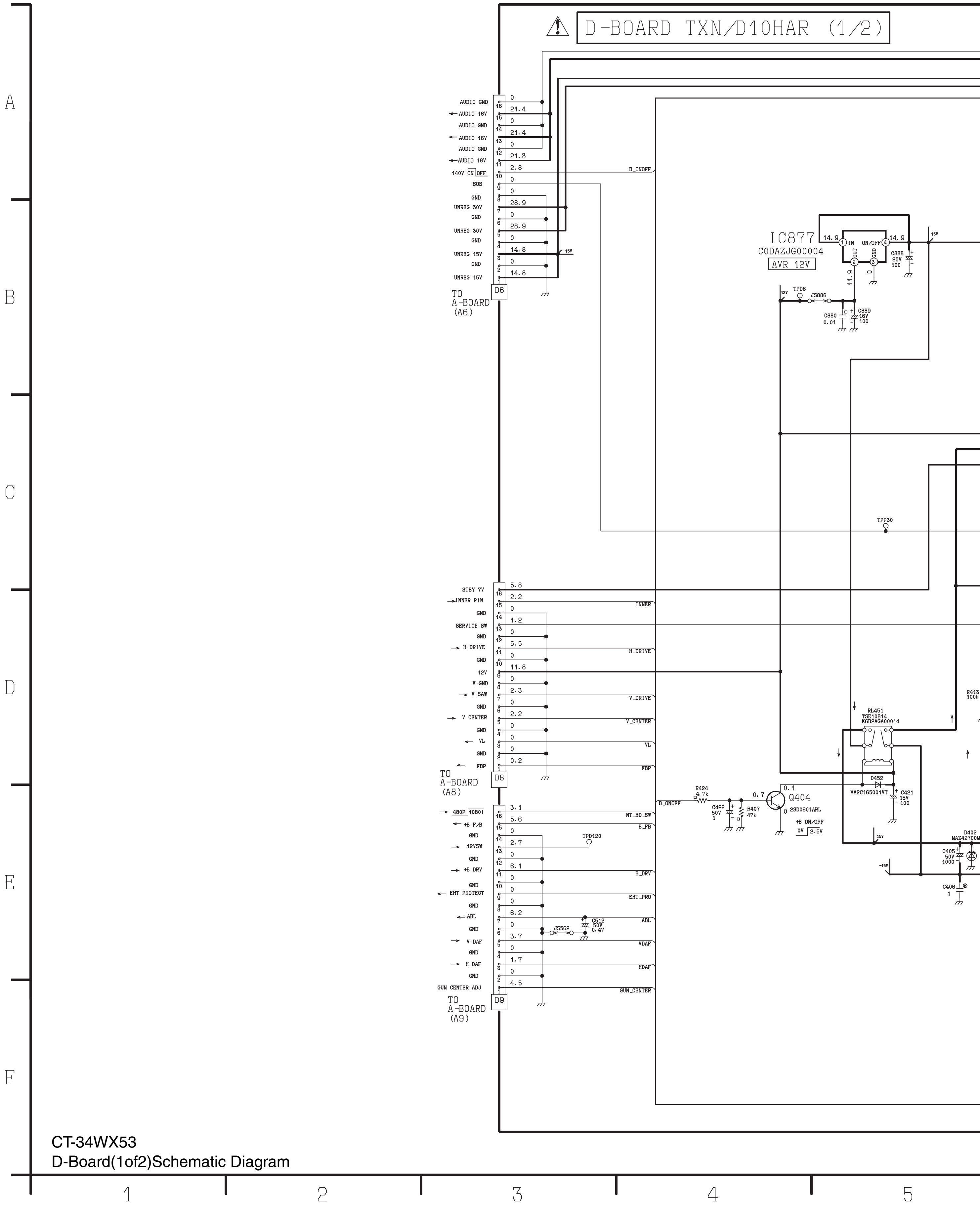

P-BOARD TXN/P10HAR
TO A-BOARD (AC2)
P1
IC801
AN8029
Q801
B1DEGQ000006
T801
ETS42AU135AD
IC811
CNC1S171R
B3PAA0000012
HOT
A
B
C
D
E
1
2
3
4

CT-34WX53
P-Board Schematic Diagram

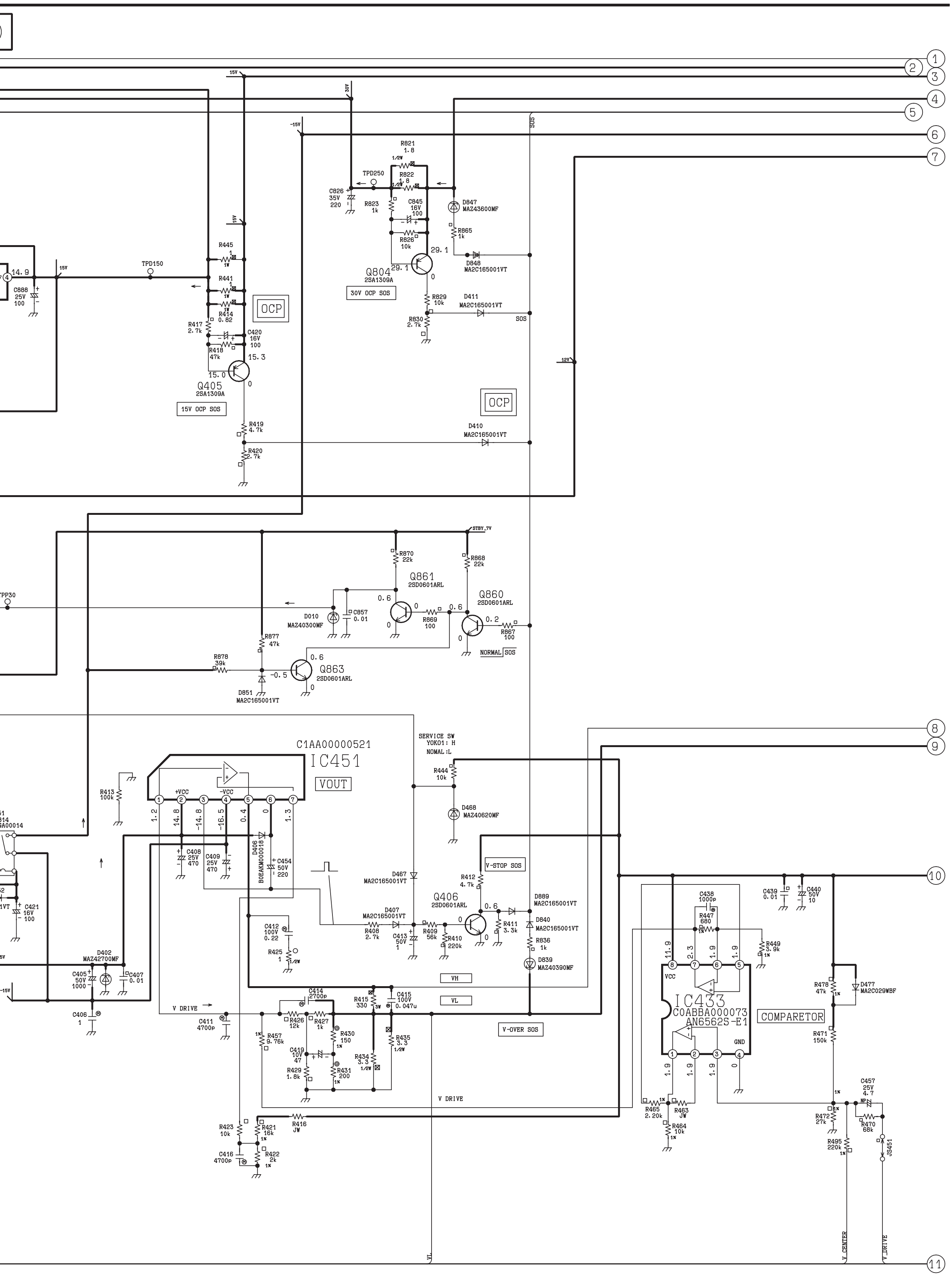

TO
D-BOARD
(D11)
P11
+B ON OFF
AUDIO +16V
AUDIO +16V
AUDIO GND
AUDIO GND
210V (H)
210V (H)
TO
D-BOARD
(D12)
P12
SOS
UNREG +15V
UNREG +15V
GND
GND
UNREG +30V
GND
UNREG -15V
TO
D-BOARD
(D14)
P14
210V (ABL)
140V (EHT)
140V (EHT)
140V (DAF)
GND
GND
TO
L-BOARD
(L3)
P15
140V (VM)
210V (CRT DRIVE)
HEATER
GND
GND
P20
AUDIO 16V
AUDIO GND
UNREG 30V
UNREG -15V
UNREG 15V
140V
140V OCP SOS
+B ON/OFF
T801
ETS42AU135AD
C844
1kV
470p
D830
B0JBSK000011
C843
35V
1000
L824
EXCELDR35V
JS828
TPP22
TPP26
TPP210
TPP27
L819
EXCELSA24T
C828
1kV
330p
D827
B0HANM000016
C834
35V
2200
TPP32
L825
G0A820GA0017
82u
TPP19
R872
0.22
JS881
C842
1kV
330p
L821
EXCELDR35V
D829
B0HANM000016
C841
35V
1000
L827
G0A470GA0002
TPP21
C839
1kV
150p
JS815
L820
EXCELSA24T
D828
MA3D690
C850
25V
2700
C838
25V
2700
L826
G0A820GA0017
82u
TPP20
C840
25V
470
L815
EXCELSA39E
L813
EXCELSA39E
D825
B0HANR000003
TPP15
L816
EXCELSA39E
C870
2kV
1000p
C831
2kV
1000p
C830
160V
680
L832
EXCELDR35V
D867
EG01A
C858
200V
47
L831
EXCELSA39E
D866
B0HAGV000004
L833
G0A820GA0017
82u
RL804
K6B2AGA00014
D831
MA2C165001VT
C859
25V
470
R838
33
R834
100k
C816
2kV
1000p
C837
250V
47
R852
27k
R853
5.6k
C869
250V
47
D836
B0HAKM000005
R857
1.2
R858
1.2
C848
6.3V
100
R860
1k
R859
2.7k
Q854
2SB1011000RL
D837
MA2C165001VT
R848
JW
R846
47k
R847
3.9k
D841
MAZ40360MF
TPP140
D555
B0HAHM000008
B0HAGM000005
Q808
2SC3311A0A
R833
100k
R831
3.3k
D832
MA2C165001VT
R837
2.2k
IC802
C0EAS0000024
ERROR DET
R835
100
IC811
CNC1S171R
B3PAA0000012
R839
2.2k
C846
50V
1
R840
47
D833
MAZ41100HF
D834
B0HAKM000005
Q806
2SC3311A0A
R841
100k
R842
22k
C847
35V
47
R843
680
R854
1k
Q805
2SC3311A0A
R845
3.3k
R844
100k
JS850
IC504
C0DAAHH00013
5V
ON/OFF
VO S
GND
V OUT
V IN
L565
G0A470F00004
47uH
C574
35V
470
D512
B0JANE000006
R537
560
R538
110
L564
G0A330G00010
33uH
TPA8
C583
0.01
C582
16V
220
D522
MAZ41000MF
C581
10V
470
L563
150uH
G0A151ZA0004
L562
EXCELSA24

CT-34WX53
P-Board Schematic Diagram

10.6. D-Board (1 of 2)Schematic Diagram


D-BOARD TXN/D10HAR (1/2)
A
B
C
D
E
F
1
2
3
4
5
AUDIO GND
AUDIO 16V
AUDIO GND
AUDIO 16V
AUDIO GND
AUDIO 16V
140V ON OFF
SOS
GND
UNREG 30V
GND
UNREG 30V
GND
UNREG 15V
GND
UNREG 15V
0
21.4
0
21.4
0
21.3
2.8
0
0
28.9
0
28.9
0
14.8
0
14.8
15V
D6
TO A-BOARD (A6)
B_ONOFF
IC877
C0DAZJG00004
AVR 12V
14.9
IN
ON/OFF
OUT
GND
14.9
11.9
0
15V
C888 25V 100
12V
TPD6
JS886
C880 0.01
C889 16V 100
TPP30
STBY 7V
INNER PIN
GND
SERVICE SW
GND
H DRIVE
GND
12V
V-GND
V SAW
GND
V CENTER
GND
VL
GND
FBP
5.8
2.2
0
1.2
0
5.5
0
11.8
0
2.3
0
2.2
0
0
0
0.2
INNER
H_DRIVE
V_DRIVE
V_CENTER
VL
FBP
D8
TO A-BOARD (A8)
480P 1080I
+B F/B
GND
12VSW
GND
+B DRV
GND
EHT PROTECT
GND
ABL
GND
V DAF
GND
H DAF
GND
GUN CENTER ADJ
3.1
5.6
0
2.7
0
6.1
0
0
0
6.2
0
3.7
0
1.7
0
4.5
NT_HD_SW
B_FB
TPD120
B_DRV
EHT_PRO
ABL
JS562
C512 50V 0.47
VDAF
HDAF
GUN_CENTER
D9
TO A-BOARD (A9)
B_ONOFF
R424 4.7k
C422 50V 1
R407 47k
0.7
0.1
Q404
2SD0601ARL
0
+B ON/OFF
0V 2.5V
RL451
TSE10814
K6B2AGA00014
D452
MA2C165001VT
C421 16V 100
R413 100k
15V
-15V
D402
MA242700M
C405 50V 1000
C406 1

CT-34WX53
D-Board(1of2)Schematic Diagram

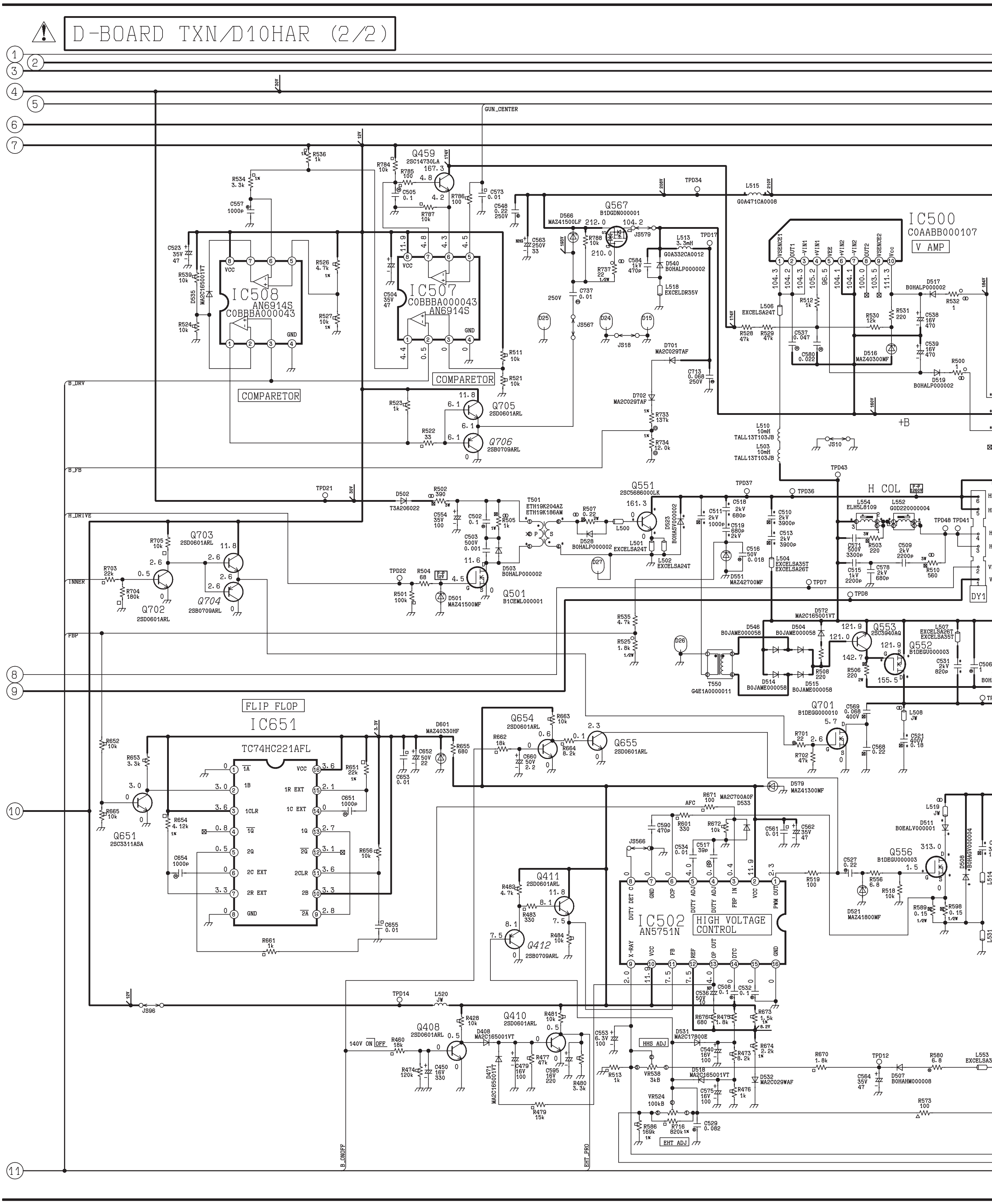

①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
15V
30V
-15V
SOS
R821 1.8
R822 1.8
TPD250
C826 35V 220
R823 1k
C845 16V 100
D847 MAZ43600MF
R826 10k
R865 1k
D848 MA2C165001VT
Q804 2SA1309A
29.1
30V OCP SOS
R829 10k
D411 MA2C165001VT
R830 2.7k
R445 1 1W
R441 1 1W
R414 0.82
TPD150
14.9
C888 25V 100
R417 2.7k
C420 16V 100
R418 47k
15.3
15.0
Q405 2SA1309A
15V OCP SOS
OCP
12V
R419 4.7k
R420 2.7k
D410 MA2C165001VT
STBY_TV
R870 22k
R868 22k
Q861 2SD0601ARL
Q860 2SD0601ARL
TPP30
D010 MAZ40300MF
C857 0.01
R869 100
R867 100
NORMAL SOS
R877 47k
R878 39k
Q863 2SD0601ARL
D851 MA2C165001VT
-0.5
0.6
0.2
C1AA00000521
IC451
VOUT
+VCC
-VCC
1.2
14.8
-14.8
-16.5
0.4
0
1.3
R413 100k
C408 25V 470
C409 25V 470
D406 B0EAKM000018
C454 50V 220
SERVICE SW YOKO1: H NOMAL:L
R444 10k
D468 MAZ40620MF
D467 MA2C165001VT
V-STOP SOS
R412 4.7k
Q406 2SD0601ARL
D407 MA2C165001VT
R408 2.7k
C413 50V 1
R409 56k
R410 220k
R411 3.3k
D889 MA2C165001VT
D840 MA2C165001VT
R836 1k
D839 MAZ40390MF
C412 100V 0.22
R425 1 1/2W
C421 16V 100
D402 MAZ42700MF
C405 50V 1000
C407 0.01
C406 1
V DRIVE
C411 4700p
C414 2700p
R415 330 5W
C415 100V 0.047u
VH
VL
V-OVER SOS
R426 12k
R427 1k
R457 9.76k
R430 150
R435 3.3 1/2W
C419 10V 47
R434 3.3 1/2W
R429 1.8k
R431 200
R423 10k
R421 16k
R416 JW
C416 4700p
R422 2k
C438 1000p
R447 680
C439 0.01
C440 50V 10
R449 3.9k
IC433
C0ABBA000073
AN6562S-E1
COMPARETOR
VCC
GND
11.9
2.3
1.9
R478 47k
D477 MA2C029WBF
R471 150k
C457 25V 4.7
R465 2.20k
R463 JW
R464 10k
R472 27k
R470 68k
R495 220k
JS451
V_CENTER
V_DRIVE
VL

CT-34WX53

D-Board(1of2)Schematic Diagram

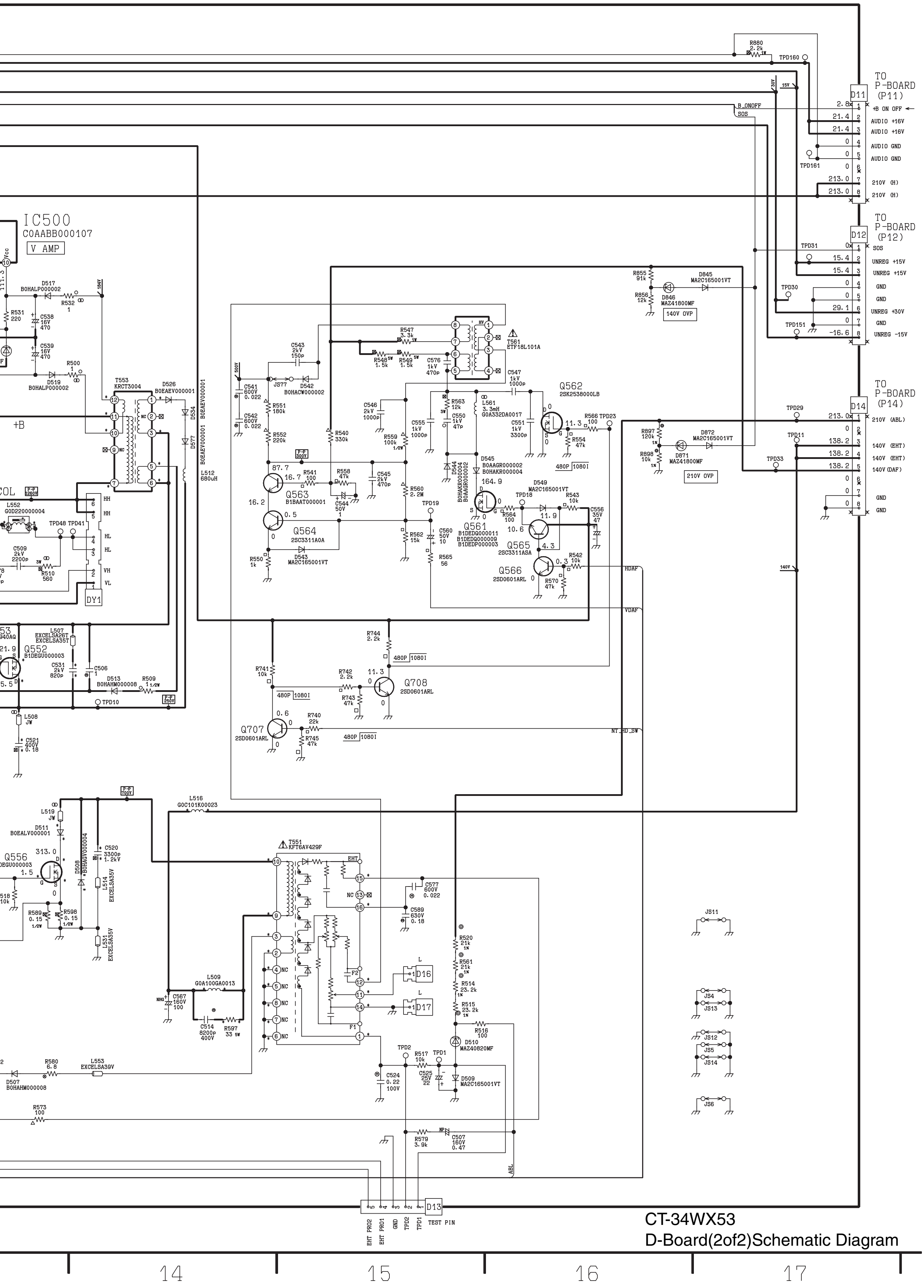
5 6 7 8 9

10.7. D-Board (2 of 2)Schematic Diagram


D-BOARD TXN/D10HAR (2/2)
1
2
3
4
5
6
7
8
9
10
11
GUN_CENTER
B_DRV
B_FB
H_DRIVE
INNER
FBP
B_ONOFF
EHT_PRO
IC508
AN6914S
C0BBBA000043
COMPARETOR
IC507
C0BBBA000043
AN6914S
COMPARETOR
Q459
2SC1473OLA
Q567
B1DGDN000001
IC500
C0AABB000107
V AMP
Q705
2SD0601ARL
Q706
2SB0709ARL
Q703
2SD0601ARL
Q702
2SD0601ARL
Q704
2SB0709ARL
Q551
2SC5686000LK
Q501
B1CEML000001
T501
ETH19K204AZ
ETH19K186AM
H COL
Q553
2SC3940AQ
Q552
B1DEGU000003
Q701
B1DEGG000010
T550
G4E1A0000011
FLIP FLOP
IC651
TC74HC221AFL
Q651
2SC3311ASA
Q654
2SD0601ARL
Q655
2SD0601ARL
Q411
2SD0601ARL
Q412
2SB0709ARL
IC502
AN5751N
HIGH VOLTAGE CONTROL
Q556
B1DEGU000003
Q408
2SD0601ARL
Q410
2SD0601ARL
HHS ADJ
EHT ADJ
140V ON OFF
+B
DY1
9
10
11
12
13

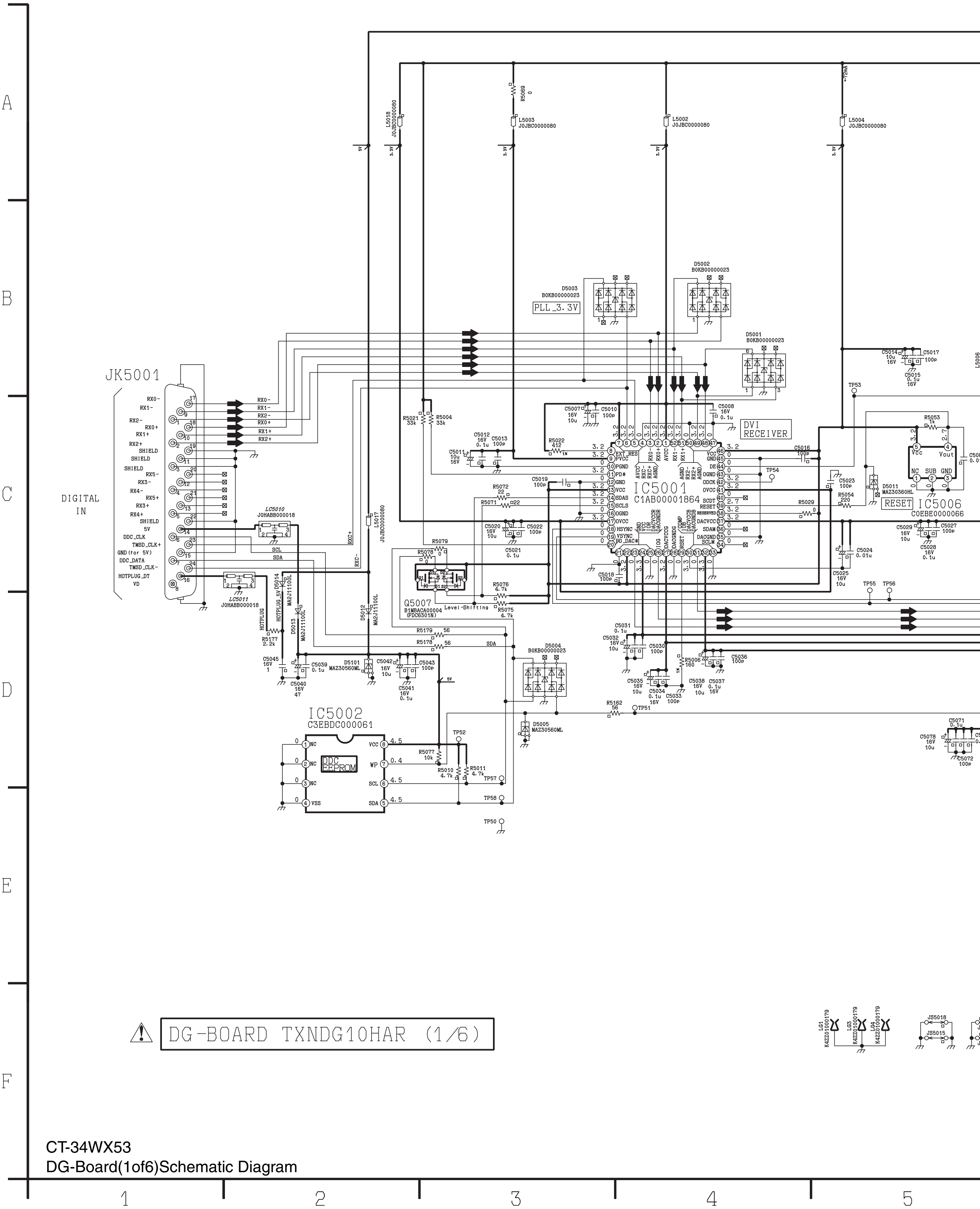
CT-34WX53

D-Board(2of2)Schematic Diagram


IC500
C0AABB000107
V AMP
TO P-BOARD (P11)
D11
+B ON OFF
AUDIO +16V
AUDIO +16V
AUDIO GND
AUDIO GND
210V (H)
210V (H)
TO P-BOARD (P12)
D12
SOS
UNREG +15V
UNREG +15V
GND
GND
UNREG +30V
GND
UNREG -15V
TO P-BOARD (P14)
D14
210V (ABL)
140V (EHT)
140V (EHT)
140V (DAF)
GND
GND
B_ONOFF
SOS
R880 2.2k
TPD160
TPD161
TPD31
TPD30
TPD151
TPD29
TPD11
TPD33
R855 91k
R856 12k
D845 MA2C165001VT
D846 MAZ41800MF
140V OVP
R897 120k
R898 10k
D872 MA2C165001VT
D871 MAZ41800MF
210V OVP
T561 ETF16L101A
Q562 2SK2538000LB
Q563 B1BAAT000001
Q564 2SC3311A0A
Q561 B1DEDQ000011 B1DEDQ000009 B1DEDP000003
Q565 2SC3311ASA
Q566 2SD0601ARL
Q708 2SD0601ARL
Q707 2SD0601ARL
T553 KRCT3004
DY1
Q552 B1DEGU000003
Q556
T551 KFT6AV429F
EHT
D16
D17
D13
TEST PIN
EHT PRO2
EHT PRO1
GND
TPD2
TPD1
HDAF
VDAF
NT_HD_SW
ABL
480P 1080I
L516 G0C101K00023
L509 G0A100GA0013
D510 MAZ40820MF
D509 MA2C165001VT
JS11
JS4
JS13
JS12
JS5
JS14
JS6
14
15
16
17

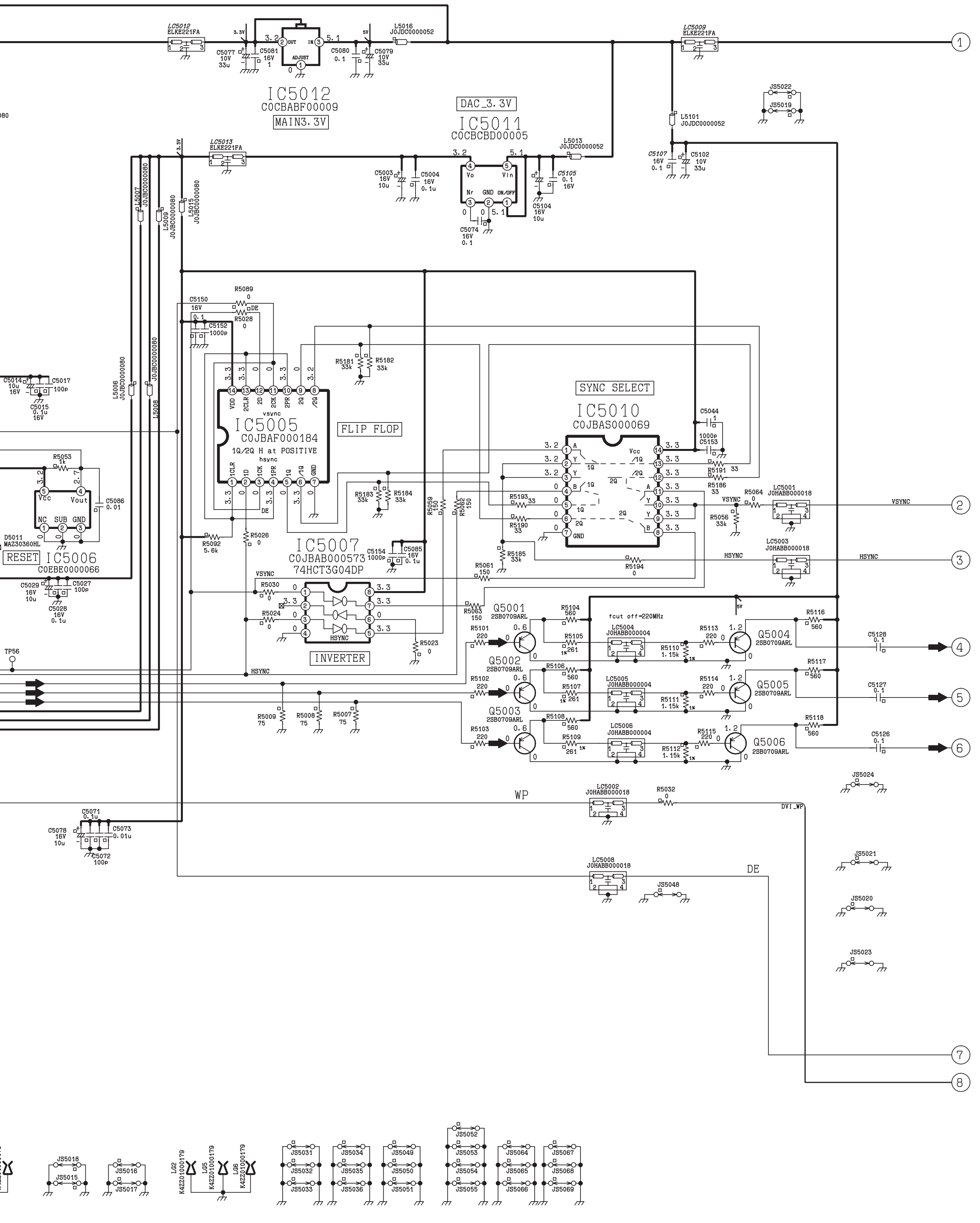
CT-34WX53
D-Board(2of2)Schematic Diagram

10.8. DG-Board (1 of 6) Schematic Diagram


A
B
C
D
E
F
1
2
3
4
5
JK5001
DIGITAL IN
RX0-
RX1-
RX2-
RX0+
RX1+
RX2+
SHIELD
SHIELD
SHIELD
RX5-
RX3-
RX4-
RX5+
RX3+
RX4+
SHIELD
5V
DDC_CLK
TMSD_CLK+
GND(for 5V)
DDC_DATA
TMSD_CLK-
HOTPLUG_DT
VD
LC5010
J0HABB000018
LC5011
J0HABB000018
SCL
SDA
HOTPLUG
HOTPLUG_5V
D5014
MA2J1110GL
D5013
MA2J1110GL
D5012
MA2J1110GL
D5101
MAZ30560ML
R5177
2.2k
R5179
56
R5178
56
L5017
J0JBC0000080
L5018
J0JBC0000080
L5003
J0JBC0000080
L5002
J0JBC0000080
L5004
J0JBC0000080
R5069
0
5V
3.3V
RXC+
RXC-
R5021
33k
R5004
33k
Q5007
B1MBACA00004
(FDC6301N)
Level-Shifting
R5078
R5079
R5076
4.7k
R5075
4.7k
R5072
22
R5071
22
R5022
412
D5003
B0KB00000023
PLL_3.3V
D5002
B0KB00000023
D5001
B0KB00000023
D5004
B0KB00000023
D5005
MAZ30560ML
IC5001
C1AB00001864
DVI RECEIVER
EXT_RES
PVCC
PGND
PD#
GND
VCC
SDAS
SCLS
OGND
OVCC
HSYNC
VSYNC
BD_DAC#
AVCC
RXC-
RXC+
AGND
RX0-
RX0+
RX1-
RX1+
RX2-
RX2+
DE
ODCK
RESET
RESERVED
DACVCC
SDAM
DACGND
SCLM
IC5002
C3EBDC000061
DDC EEPROM
NC
VSS
VCC
WP
SCL
SDA
R5077
10k
R5010
4.7k
R5011
4.7k
TP50
TP51
TP52
TP53
TP54
TP55
TP56
TP57
TP58
R5162
56
R5006
160
R5053
1k
R5054
220
R5029
0
D5011
MAZ30360HL
RESET
IC5006
C0EBE0000066
Vcc
Vout
NC
SUB
GND
L5006
LG1
LG3
LG4
K4ZZ01000179
JS5018
JS5015
DG-BOARD TXNDG10HAR (1/6)

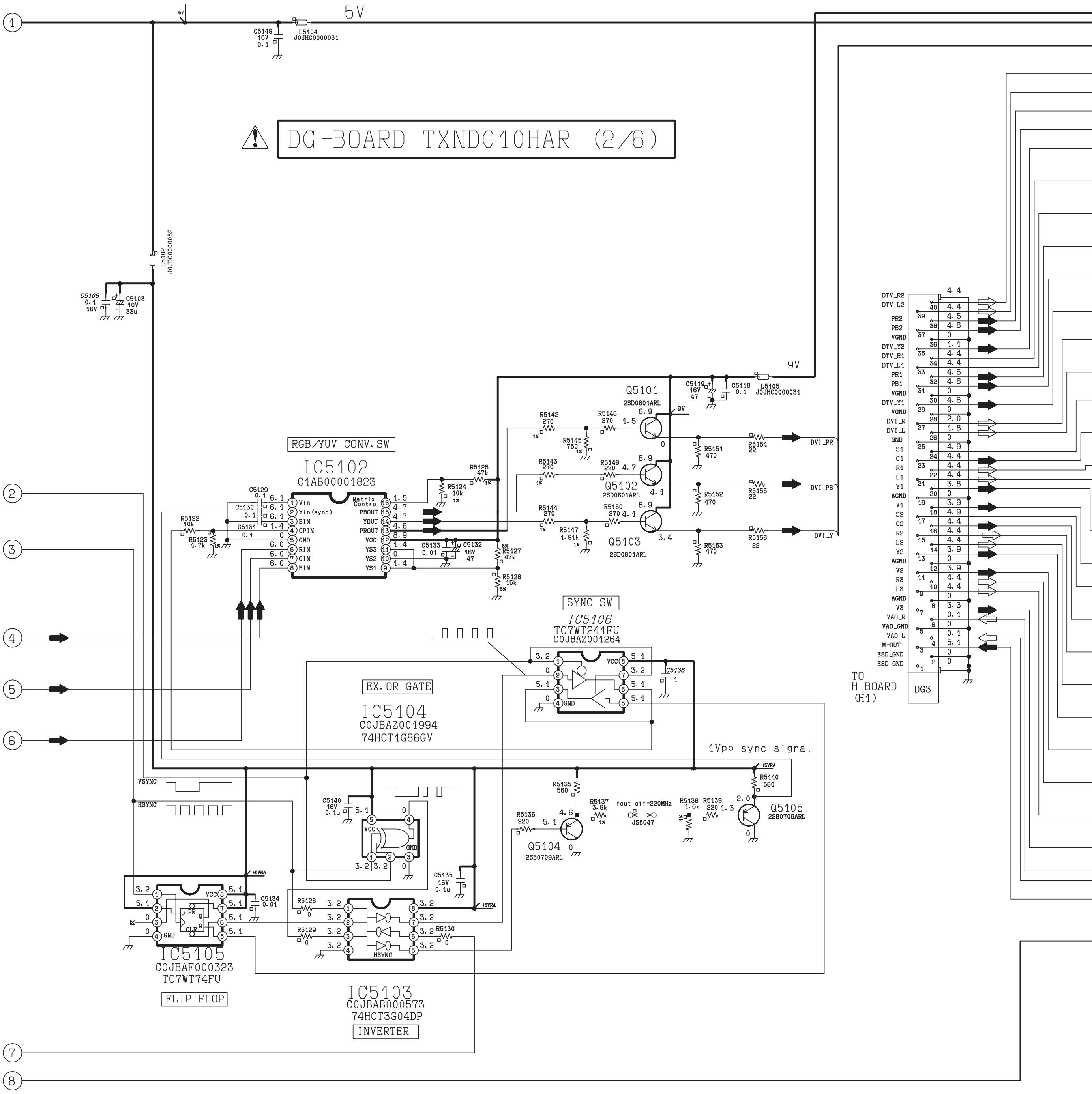
CT-34WX53

DG-Board(1of6)Schematic Diagram

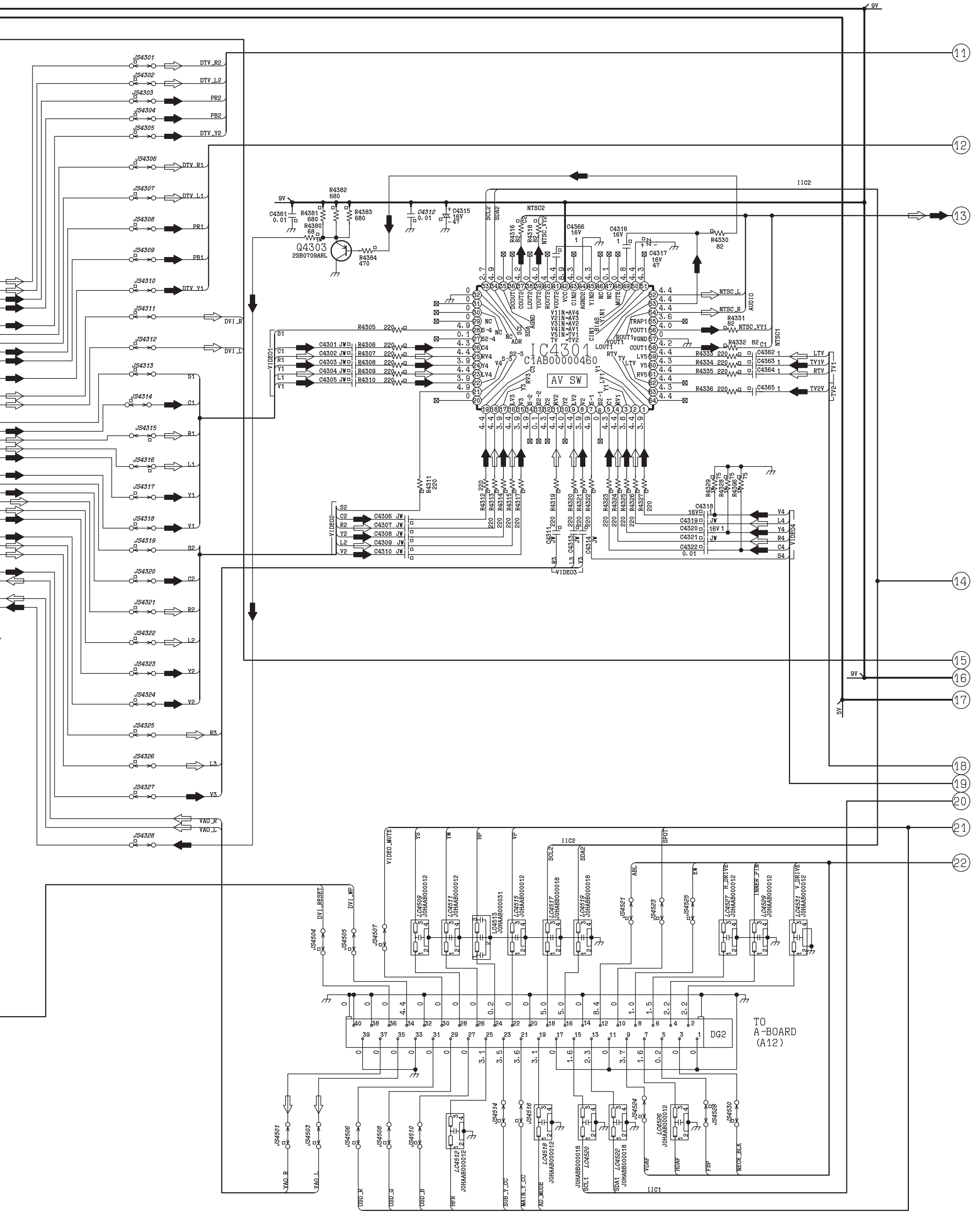

LC5012 ELKE221FA
IC5012 C0CBABF00009
MAIN3.3V
OUT
IN
ADJUST
C5077 10V 33u
C5081 16V 1
C5080 0.1
C5079 10V 33u
L5016 J0JDC0000052
LC5009 ELKE221FA
DAC_3.3V
IC5011 C0CBCBD00005
Vo
Vin
Nr
GND
ON/OFF
C5003 16V 10u
C5004 16V 0.1u
C5105 0.1 16V
C5104 16V 10u
C5074 16V 0.1
L5013 J0JDC0000052
LC5013 ELKE221FA
L5007 J0JBC0000080
L5009 J0JBC0000080
L5015 J0JBC0000080
L5101 J0JDC0000052
C5107 16V 0.1
C5102 10V 33u
JS5022
JS5019
C5150 16V 0.1
R5089 0
R5028 0
C5152 1000p
DE
IC5005 C0JBAF000184
1Q/2Q H at POSITIVE
vsync
hsync
FLIP FLOP
VDD 2CLR 2D 2CK 2PR 2Q /2Q
1CLR 1D 1CK 1PR 1Q /1Q GND
R5181 33k
R5182 33k
R5183 33k
R5184 33k
L5006 J0JBC0000080
L5008 J0JBC0000080
C5014 10u 16V
C5017 100p
C5015 0.1u 16V
R5053 1k
Vcc
Vout
NC SUB GND
C5086 0.01
D5011 MAZ30360HL
RESET
IC5006 C0EBE0000066
C5029 16V 10u
C5027 100p
C5028 16V 0.1u
R5092 5.6k
R5026 0
IC5007 C0JBAB000573 74HCT3G04DP
C5154 1000p
C5085 16V 0.1u
INVERTER
VSYNC
HSYNC
R5030 0
R5024 0
R5023 0
SYNC SELECT
IC5010 C0JBAS000069
A Y B Vcc /1Q /2Q 1Q 2Q GND
C5044 1
C5153 1000p
R5191 33
R5186 33
R5193 33
R5190 33
R5185 33k
R5059 150
R5062 150
R5061 150
R5194 0
R5064 0
R5056 33k
LC5001 J0HABB000018
LC5003 J0HABB000018
VSYNC
HSYNC
R5063 150
Q5001 2SB0709ARL
Q5002 2SB0709ARL
Q5003 2SB0709ARL
Q5004 2SB0709ARL
Q5005 2SB0709ARL
Q5006 2SB0709ARL
R5101 220
R5102 220
R5103 220
R5104 560
R5105 261
R5106 560
R5107 261
R5108 560
R5109 261
fcut off=220MHz
LC5004 J0HABB000004
LC5005 J0HABB000004
LC5006 J0HABB000004
R5110 1.15k
R5111 1.15k
R5112 1.15k
R5113 220
R5114 220
R5115 220
R5116 560
R5117 560
R5118 560
C5128 0.1
C5127 0.1
C5126 0.1
5V
TP56
R5009 75
R5008 75
R5007 75
WP
LC5002 J0HABB000018
R5032 0
DVI_WP
JS5024
C5071 0.1u
C5078 16V 10u
C5073 0.01u
C5072 100p
LC5008 J0HABB000018
JS5048
DE
JS5021
JS5020
JS5023
①
②
③
④
⑤
⑥
⑦
⑧
JS5018
JS5015
JS5016
JS5017
L62 K4ZZ01000179
L65 K4ZZ01000179
L66 K4ZZ01000179
JS5031 JS5032 JS5033
JS5034 JS5035 JS5036
JS5049 JS5050 JS5051
JS5052 JS5053 JS5054 JS5055
JS5064 JS5065 JS5066
JS5067 JS5068 JS5069
5
6
7
8
9

CT-34WX53
DG-Board(1of6)Schematic Diagram

10.9. DG-Board (2 of 6) Schematic Diagram


DG-BOARD TXNDG10HAR (2/6)
5V
C5149 16V 0.1
L5104 J0JHC0000031
L5102 J0JDC0000052
C5106 0.1 16V
C5103 10V 33u
9V
Q5101 2SD0601ARL
Q5102 2SD0601ARL
Q5103 2SD0601ARL
C5119 16V 47
C5118 0.1
L5105 J0JHC0000031
RGB/YUV CONV. SW
IC5102
C1AB00001823
Yin
Yin(sync)
BIN
CPIN
GND
RIN
GIN
BIN
Matrix Control
PBOUT
YOUT
PROUT
VCC
YS3
YS2
YS1
DVI_PR
DVI_PB
DVI_Y
SYNC SW
IC5106
TC7WT241FU
C0JBAZ001264
EX. OR GATE
IC5104
C0JBAZ001994
74HCT1G86GV
1Vpp sync signal
VSYNC
HSYNC
Q5104 2SB0709ARL
Q5105 2SB0709ARL
fcut off=220MHz
JS5047
IC5105
C0JBAF000323
TC7WT74FU
FLIP FLOP
IC5103
C0JBAB000573
74HCT3G04DP
INVERTER
TO H-BOARD (H1)
DG3
DTV_R2
DTV_L2
PR2
PB2
VGND
DTV_Y2
DTV_R1
DTV_L1
PR1
PB1
VGND
DTV_Y1
VGND
DVI_R
DVI_L
GND
S1
C1
R1
L1
Y1
AGND
V1
S2
C2
R2
L2
Y2
AGND
V2
R3
L3
AGND
V3
VAO_R
VAO_GND
VAO_L
M-OUT
ESD_GND
ESD_GND
①
②
③
④
⑤
⑥
⑦
⑧

CT-34WX53
DG-Board(2of6)Schematic Diagram

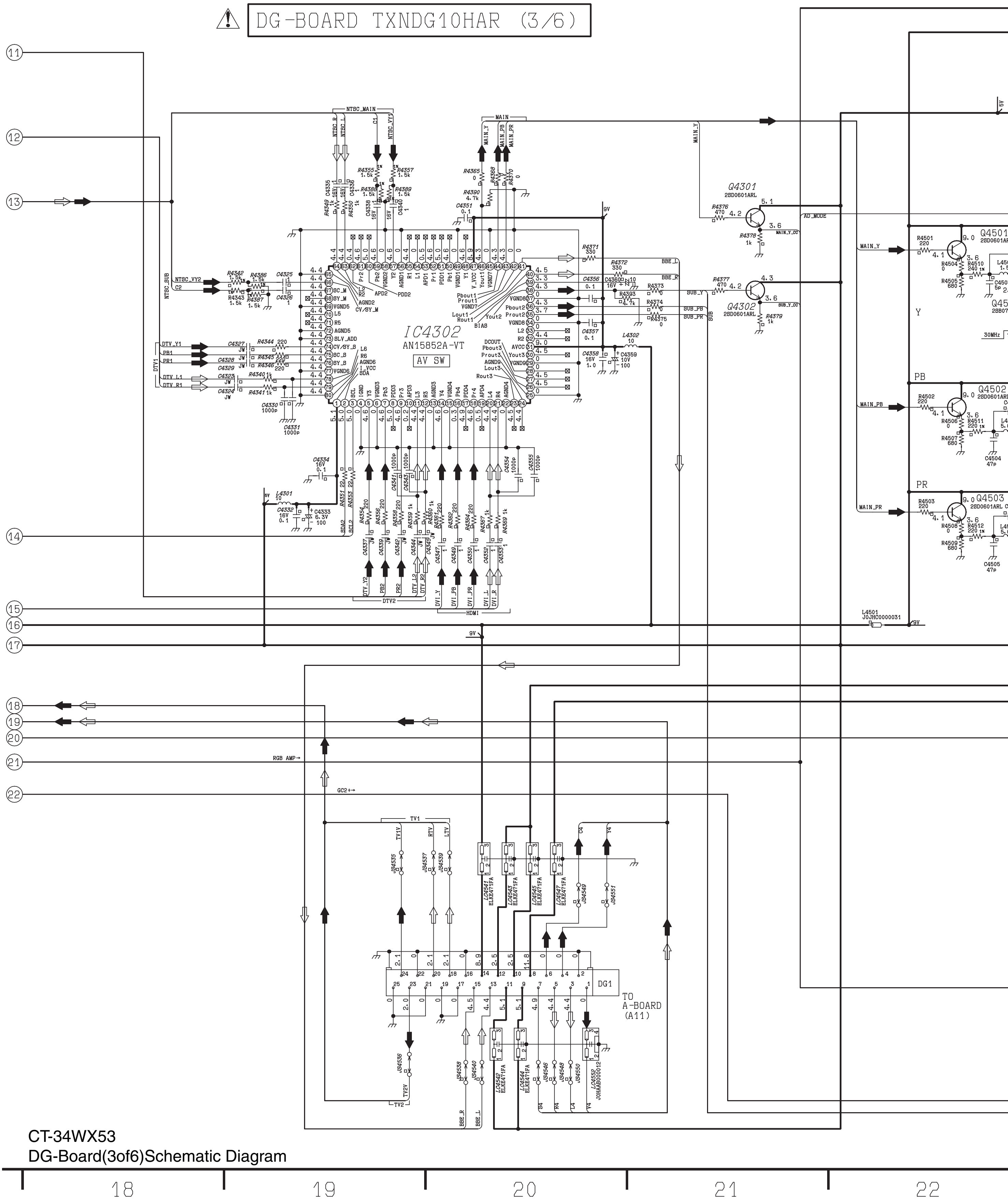


9V
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
JS4301
DTV_R2
JS4302
DTV_L2
JS4303
PR2
JS4304
PB2
JS4305
DTV_Y2
JS4306
DTV_R1
JS4307
DTV_L1
JS4308
PR1
JS4309
PB1
JS4310
DTV_Y1
JS4311
DVI_R
JS4312
DVI_L
JS4313
S1
JS4314
C1
JS4315
R1
JS4316
L1
JS4317
Y1
JS4318
V1
JS4319
S2
JS4320
C2
JS4321
R2
JS4322
L2
JS4323
Y2
JS4324
V2
JS4325
R3
JS4326
L3
JS4327
V3
VAO_R
VAO_L
JS4328
IIC2
R4382 680
R4381 680
R4383 680
R4380 68
C4361 0.01
C4312 0.01
C4315 16V 47
Q4303
2SB0709ARL
R4384 470
NTSC2
C4366 16V 1
C4316 16V 1
C4317 16V 47
R4330 82
R4316 82
R4318 82
NTSC_VY2
NTSC_L
NTSC_R
AUDIO
R4331 82
NTSC_VY1
R4332 82
NTSC1
R4305 220
IC4301
C1AB00000460
AV SW
VIDEO1
C4301 R4306 220
C4302 R4307 220
C4303 R4308 220
C4304 R4309 220
C4305 R4310 220
R4333 220 C4362 1 LTV
R4334 220 C4363 1 TV1V
R4335 220 C4364 1 RTV
R4336 220 C4365 1 TV2V
TV1
TV2
R4311 220
VIDEO2
C4306
C4307
C4308
C4309
C4310
R4312
R4313
R4314
R4315
R4317
R4319
R4320
R4321
R4322
R4323
R4324
R4325
R4326
R4327
R4329 75
R4328 75
R4341 75
R4340 75
C4311
C4313
C4314
VIDEO3
C4318 16V 1
C4319
C4320 16V 1
C4321
C4322 0.01
VIDEO4
5V
VIDEO_MUTE
YS
YM
HP
VP
IIC2
SCL2
SDA2
SPOT
ABL
EW
H_DRIVE
INNER_PIN
V_DRIVE
DVI_RESET
DVI_WP
JS4504
JS4505
JS4507
LC4509 J0HAAB000012
LC4511 J0HAAB000012
LC4513 J0HAAB000031
LC4515 J0HAAB000012
LC4517 J0HAAB000018
LC4519 J0HAAB000018
JS4521
JS4523
JS4525
LC4527 J0HAAB000012
LC4529 J0HAAB000012
LC4531 J0HAAB000012
DG2
TO
A-BOARD
(A12)
JS4501
JS4503
JS4506
JS4508
JS4510
LC4512 J0HAAB000012
JS4514
JS4516
LC4518 J0HAAB000012
LC4520 J0HABB000018
LC4522 J0HAAB000018
JS4524
LC4526 J0HAAB000012
JS4528
JS4530
VAO_R
VAO_L
OSD_R
OSD_G
OSD_B
HFR
SUB_Y_CC
MAIN_Y_CC
AD_MODE
SCL1
SDA1
VDAF
HDAF
FBP
NECK_BLK
IIC1
14
15
16
17

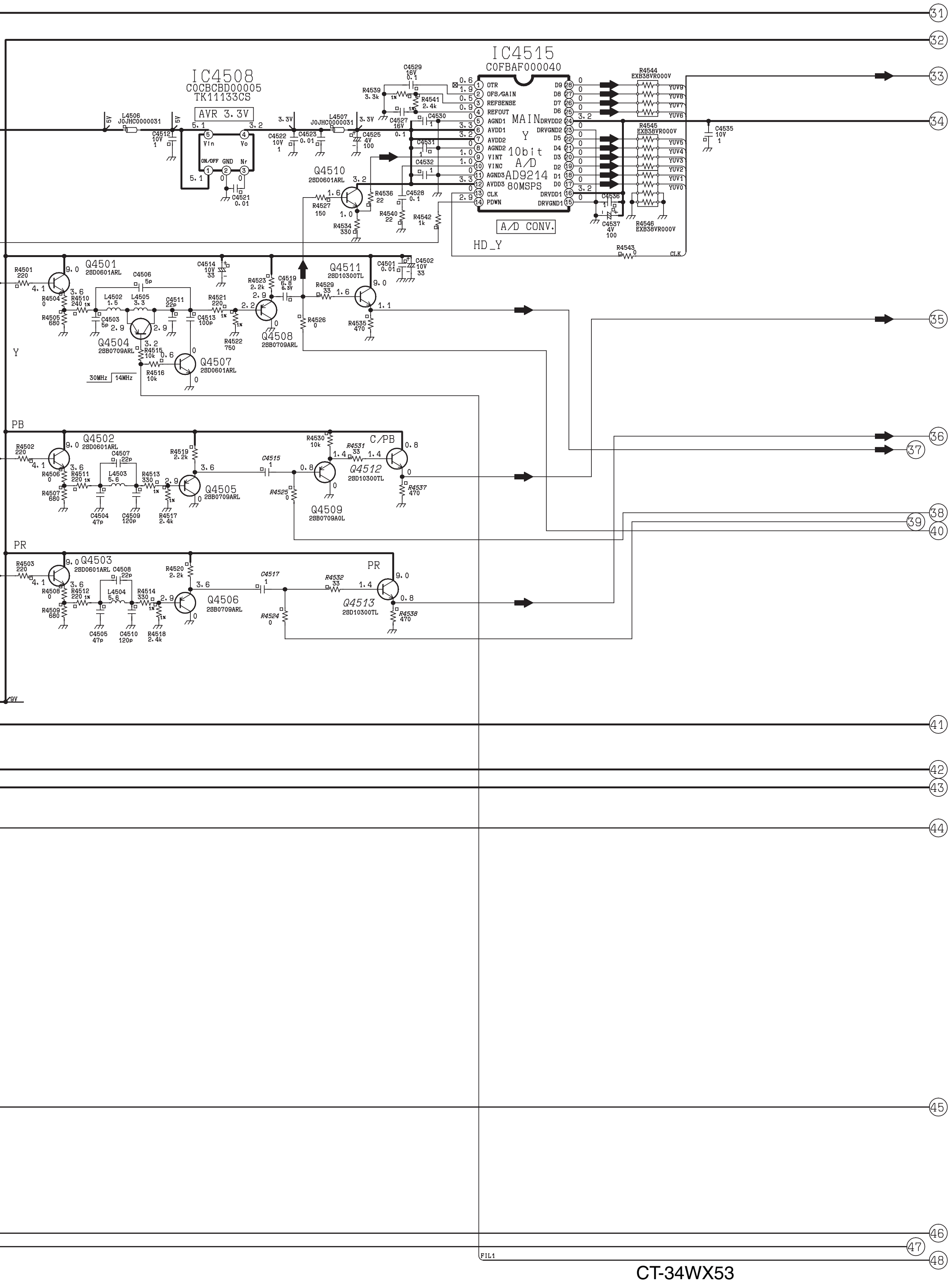
CT-34WX53

DG-Board(2of6)Schematic Diagram

10.10. DG-Board (3 of 6) Schematic Diagram


DG-BOARD TXNDG10HAR (3/6)
IC4302
AN15852A-VT
AV SW
Q4301
2SD0601ARL
Q4302
2SD0601ARL
Q4501
Q4502
Q4503
DG1
TO A-BOARD (A11)
NTSC_MAIN
MAIN
MAIN_Y
MAIN_PB
MAIN_PR
SUB_Y
SUB_PB
SUB_PR
DTV1
DTV2
HDMI
TV1
TV2
RGB AMP→
GC2+→
AD_MODE
L4501 J0JHC0000031
18
19
20
21
22

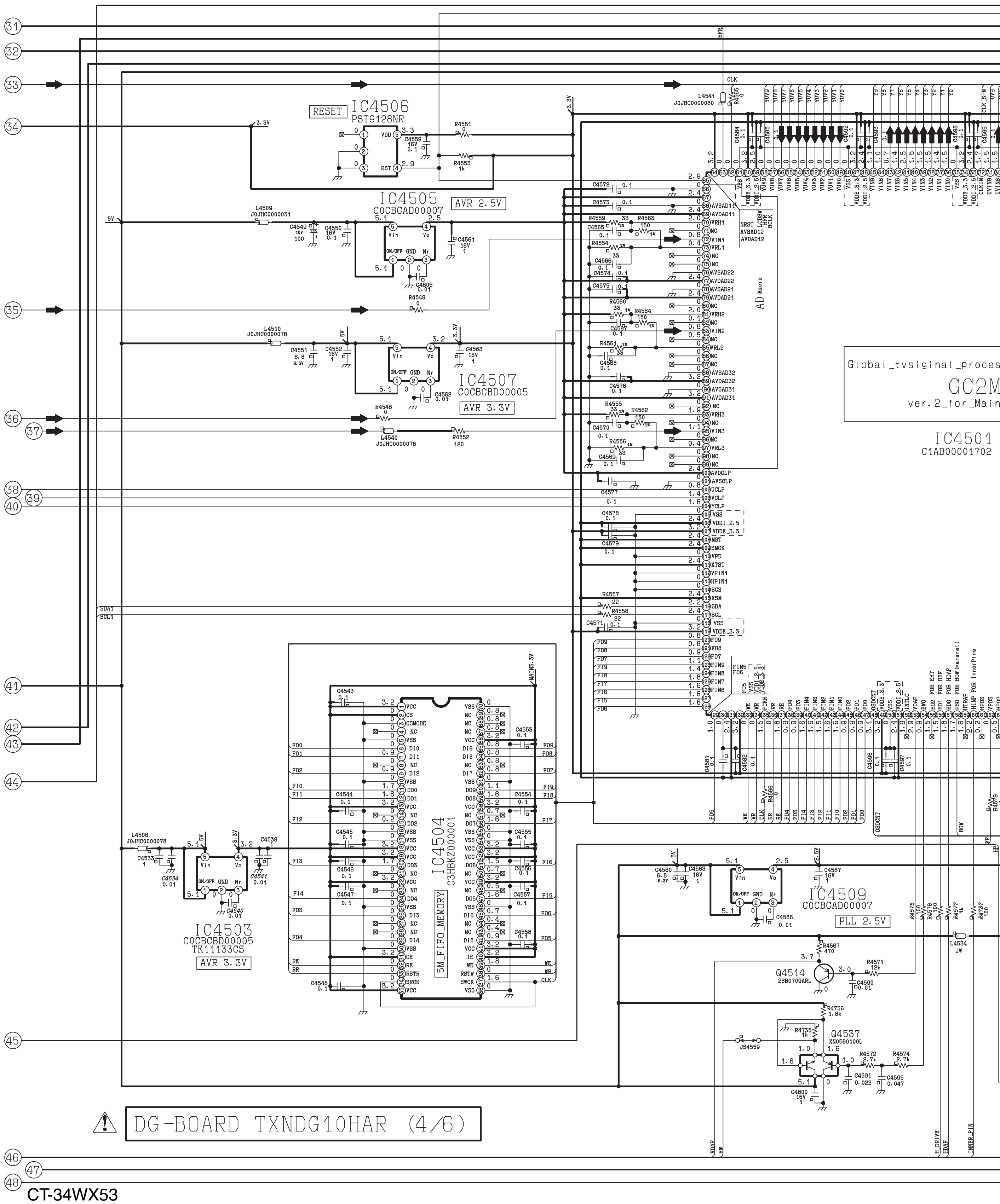
CT-34WX53
DG-Board(3of6)Schematic Diagram


IC4515
C0FBAF000040
MAIN
Y
10bit
A/D
AD9214
80MSPS
A/D CONV.
IC4508
C0CBCBD00005
TK11133CS
AVR 3.3V
Vin
Vo
ON/OFF
GND
Nr
OTR
OFS/GAIN
REFSENSE
REFOUT
AGND1
AVDD1
AVDD2
AGND2
VINT
VINC
AGND3
AVDD3
CLK
PDWN
D9
D8
D7
D6
DRVDD2
DRVGND2
D5
D4
D3
D2
D1
D0
DRVDD1
DRVGND1
R4544
EXB38VR000V
R4545
EXB38VR000V
R4546
EXB38VR000V
YUV9
YUV8
YUV7
YUV6
YUV5
YUV4
YUV3
YUV2
YUV1
YUV0
C4535
10V
1
HD_Y
R4543
CLK
Q4510
2SD0601ARL
Q4501
2SD0601ARL
Q4511
2SD1030OTL
Q4504
2SB0709ARL
Q4507
2SD0601ARL
Q4508
2SB0709ARL
30MHz
14MHz
Y
PB
Q4502
2SD0601ARL
C/PB
Q4512
2SD1030OTL
Q4505
2SB0709ARL
Q4509
2SB0709A0L
PR
Q4503
2SD0601ARL
Q4513
2SD1030OTL
Q4506
2SB0709ARL
9V
5V
3.3V
L4506
J0JHC0000031
L4507
J0JHC0000031
FIL1
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48

CT-34WX53
DG-Board(3of6)Schematic Diagram

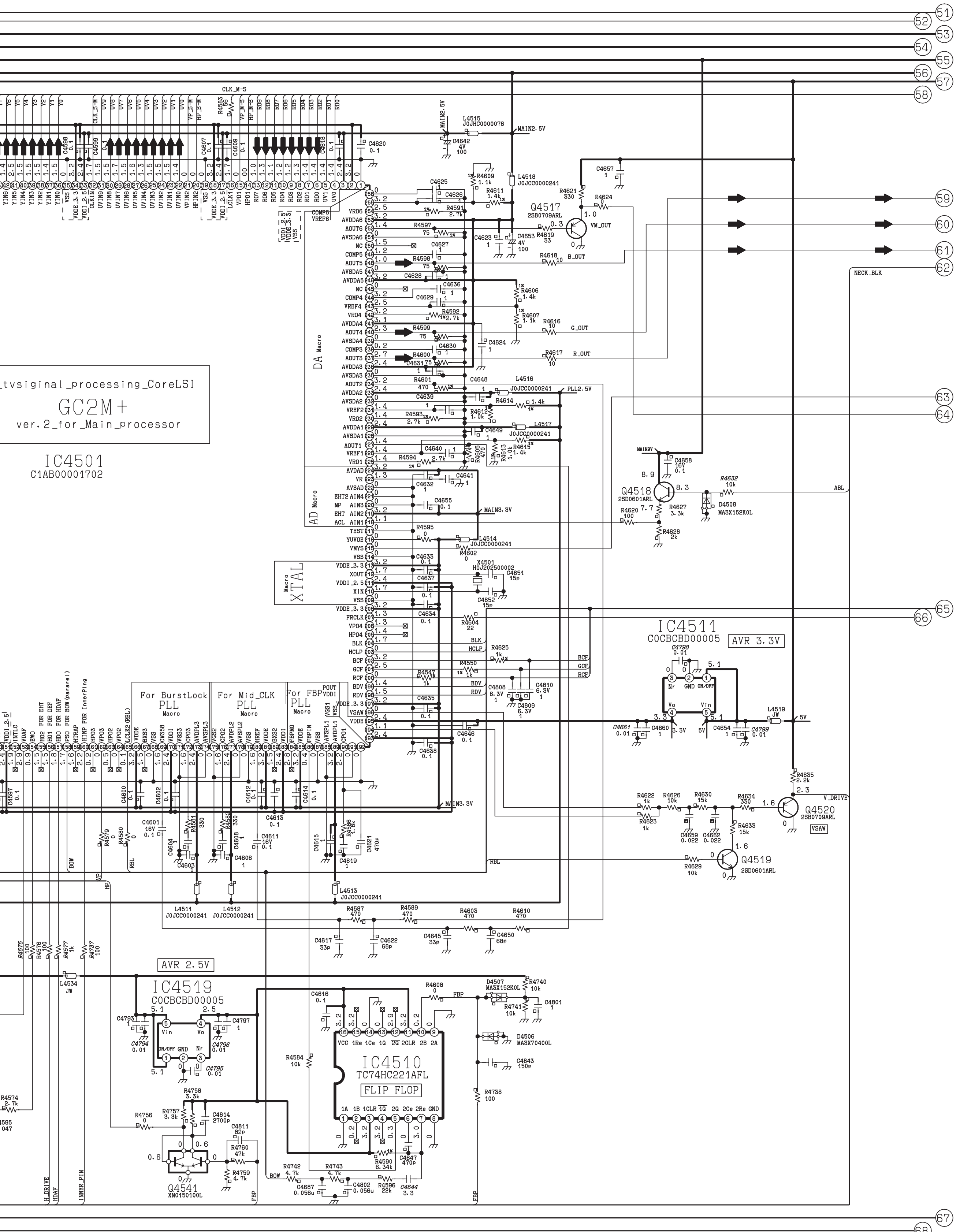
22 23 24 25 26

10.11. DG-Board (4 of 6) Schematic Diagram


31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
RESET
IC4506
PST9128NR
VDD
RST
3.3V
R4551
R4553
IC4505
C0CBCAD00007
AVR 2.5V
L4509
J0JHC0000031
5V
C4549
C4550
C4561
C4806
ON/OFF GND Nr
Vin Vo
R4549
L4510
J0JHC0000078
C4551
C4552
C4563
IC4507
C0CBCBD00005
AVR 3.3V
C4562
R4548
L4540
J0JHC0000078
R4552
120
SDA1
SCL1
AD Macro
Global_tvsiginal_proces
GC2M
ver.2_for_Main
IC4501
C1AB00001702
L4541
J0JBC0000080
CLK
HFR
MAIN3.3V
IC4504
C3HBKZ000001
5M_FIFO_MEMORY
L4508
J0JHC0000078
C4533
C4534
C4539
C4541
C4540
IC4503
C0CBCBD00005
TK11133CS
AVR 3.3V
IC4509
C0CBCAD00007
PLL 2.5V
C4580
C4583
C4587
C4586
R4567
470
Q4514
2SB0709ARL
R4571
12k
C4590
R4736
1.8k
R4735
1k
Q4537
XN0560100L
JS4559
R4572
2.7k
R4574
2.7k
C4591
0.022
C4595
0.047
C4800
L4534
JW
VDAF
EW
H_DRIVE
HDAF
INNER_PIN
DG-BOARD TXNDG10HAR (4/6)

CT-34WX53
DG-Board(4of6)Schematic Diagram

26 27 28 29 30

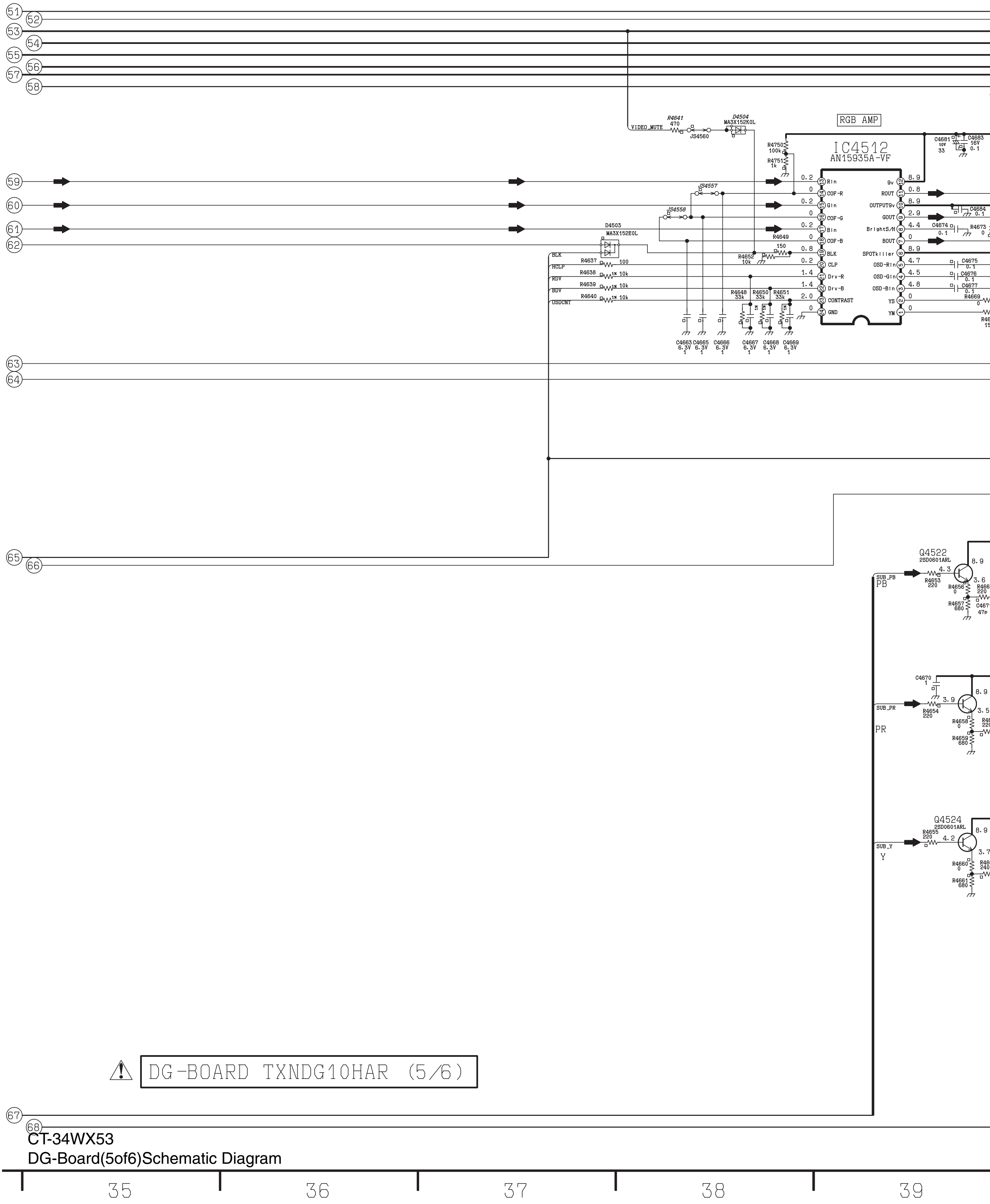

tvsiginal_processing_CoreLSI
GC2M+
ver.2_for_Main_processor
IC4501
C1AB00001702
DA Macro
AD Macro
Macro XTAL
For BurstLock PLL Macro
For Mid_CLK PLL Macro
For FBP PLL Macro
IC4511
C0CBCBD00005
AVR 3.3V
IC4519
C0CBCBD00005
AVR 2.5V
IC4510
TC74HC221AFL
FLIP FLOP
Q4517
2SB0709ARL
Q4518
2SD0601ARL
Q4519
2SD0601ARL
Q4520
2SB0709ARL
Q4541
XN0150100L
X4501
H0J202500002
D4506
MA3X704O0L
D4507
MA3X152K0L
D4508
MA3X152K0L
VM_OUT
B_OUT
G_OUT
R_OUT
NECK_BLK
ABL
V_DRIVE
VSAW
MAIN2.5V
MAIN3.3V
MAIN9V
PLL2.5V
5V
CLK_M-S
H_DRIVE
HDAF
INNER_PIN
FBP
BOW
RBL
VP
HP
(51)
(52)
(53)
(54)
(55)
(56)
(57)
(58)
(59)
(60)
(61)
(62)
(63)
(64)
(65)
(66)
(67)
(68)

CT-34WX53

DG-Board(4of6)Schematic Diagram

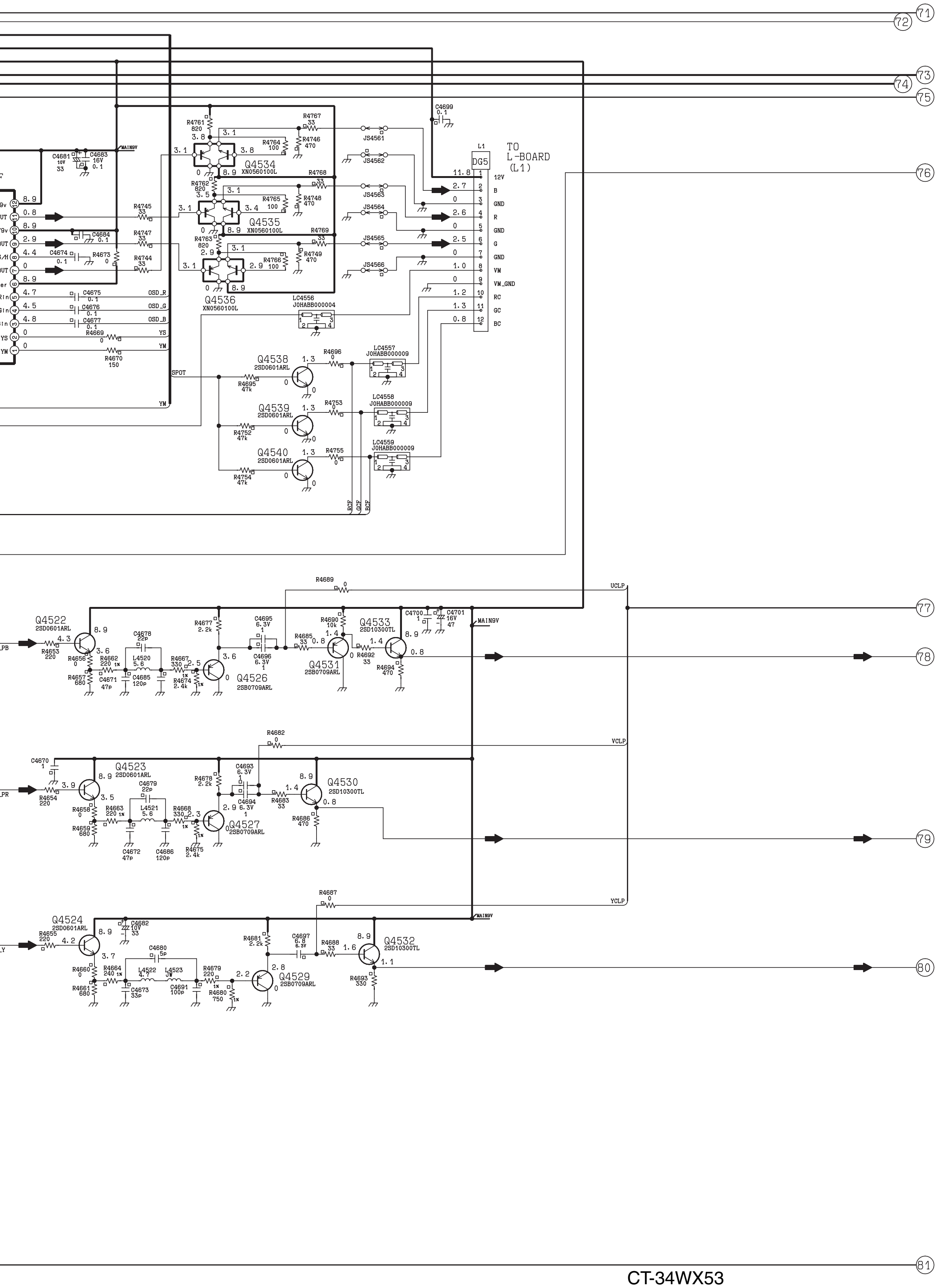
31 32 33 34

10.12. DG-Board (5 of 6) Schematic Diagram



51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
VIDEO_MUTE
R4641
470
JS4560
D4504
MA3X152K0L
RGB AMP
IC4512
AN15935A-VF
R4750
100k
R4751
1k
C4681
10V
33
C4683
16V
0.1
JS4557
JS4558
D4503
MA3X152E0L
R4649
R4652
10k
150
BLK
HCLP
RDV
BDV
OSDCNT
R4637
100
R4638
1% 10k
R4639
1% 10k
R4640
1% 10k
R4648
33k
R4650
33k
R4651
33k
C4663
6.3V
1
C4665
6.3V
1
C4666
6.3V
1
C4667
6.3V
1
C4668
6.3V
1
C4669
6.3V
1
0.2 13 Rin
0 14 COF-R
0.2 15 Gin
0 16 COF-G
0.2 17 Bin
0 18 COF-B
0.8 19 BLK
0.2 20 CLP
1.4 21 Drv-R
1.4 22 Drv-B
2.0 23 CONTRAST
0 24 GND
9v 12 8.9
ROUT 11 0.8
OUTPUT9v 10 8.9
GOUT 9 2.9
BrightS/H 8 4.4
BOUT 7 0
SPOTkiller 6 8.9
OSD-Rin 5 4.7
OSD-Gin 4 4.5
OSD-Bin 3 4.8
YS 2 0
YM 1 0
C4684
0.1
C4674
0.1
R4673
0
C4675
0.1
C4676
0.1
C4677
0.1
R4669
0
Q4522
2SD0601ARL
SUB_PB
PB
R4653
220
4.3
8.9
3.6
R4656
0
R4657
680
47p
C4670
1
SUB_PR
PR
R4654
220
3.9
8.9
3.5
R4658
0
R4659
680
Q4524
2SD0601ARL
SUB_Y
Y
R4655
220
4.2
8.9
R4660
0
R4661
680
240
⚠ DG-BOARD TXNDG10HAR (5/6)
35
36
37
38
39

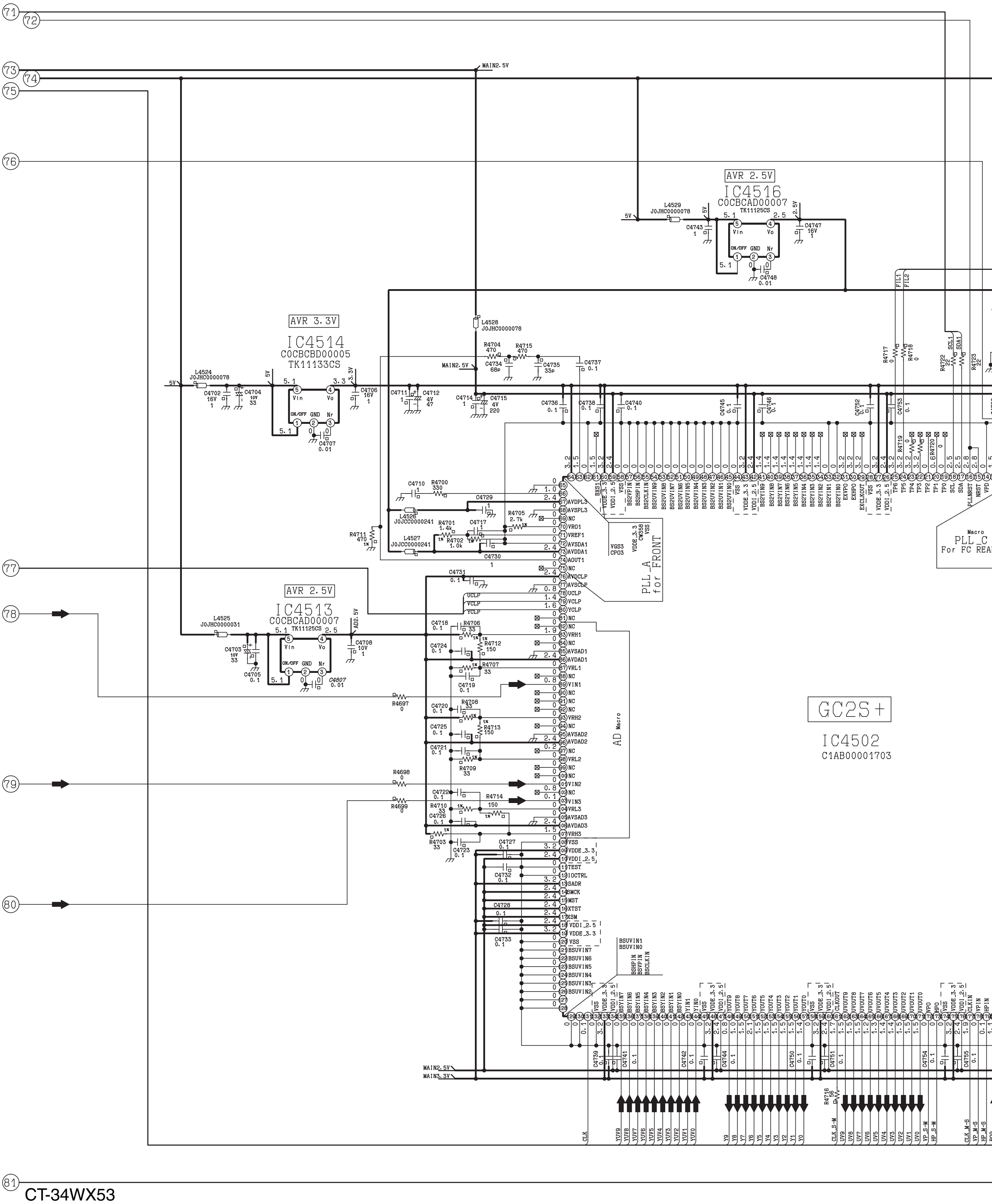
CT-34WX53
DG-Board(5of6)Schematic Diagram



TO
L-BOARD
(L1)
L1
DG5
12V
B
GND
R
GND
G
GND
VM
VM_GND
RC
GC
BC
Q4534
XN0560100L
Q4535
XN0560100L
Q4536
XN0560100L
R4761 820
R4762 820
R4763 820
R4764 100
R4765 100
R4766 100
R4767 33
R4768 33
R4769 33
R4746 470
R4748 470
R4749 470
R4745 33
R4747 33
R4744 33
R4673 0
JS4561
JS4562
JS4563
JS4564
JS4565
JS4566
C4699 0.1
C4681 10V 33
C4683 16V 0.1
C4684 0.1
C4674 0.1
C4675 0.1
C4676 0.1
C4677 0.1
R4669 0
R4670 150
MAIN9V
OSD_R
OSD_G
OSD_B
YS
YM
SPOT
LC4556
J0HABB000004
LC4557
J0HABB000009
LC4558
J0HABB000009
LC4559
J0HABB000009
Q4538
2SD0601ARL
Q4539
2SD0601ARL
Q4540
2SD0601ARL
R4695 47k
R4752 47k
R4754 47k
R4696 0
R4753 0
R4755 0
RCF
GCF
BCF
R4689 0
UCLP
VCLP
YCLP
Q4522
2SD0601ARL
R4653 220
R4656 0
R4657 680
R4662 220
C4671 47p
C4678 22P
L4520 5.6
C4685 120P
R4667 330
R4674 2.4k
R4677 2.2k
Q4526
2SB0709ARL
C4695 6.3V 1
C4696 6.3V 1
R4685 33
R4690 10k
Q4531
2SB0709ARL
R4692 33
Q4533
2SD10300TL
R4694 470
C4700 1
C4701 16V 47
Q4523
2SD0601ARL
C4670 1
R4654 220
R4658 0
R4659 680
R4663 220
C4672 47P
C4679 22P
L4521 5.6
C4686 120P
R4668 330
R4675 2.4k
R4678 2.2k
Q4527
2SB0709ARL
C4693 6.3V 1
C4694 6.3V 1
R4682 0
R4683 33
Q4530
2SD10300TL
R4686 470
Q4524
2SD0601ARL
R4655 220
R4660 0
R4661 680
R4664 240
C4673 33p
C4680 5p
L4522 4.7
L4523 3.9
C4691 100p
C4682 10V 33
R4679 220
R4680 750
R4681 2.2k
Q4529
2SB0709ARL
C4697 6.8 6.3V
R4687 0
R4688 33
Q4532
2SD10300TL
R4693 330
_PB
_PR
_Y
⑦①
⑦②
⑦③
⑦④
⑦⑤
⑦⑥
⑦⑦
⑦⑧
⑦⑨
⑧⓪
⑧①
39
40
41
42
43

CT-34WX53
DG-Board(5of6)Schematic Diagram

10.13. DG-Board (6 of 6) Schematic Diagram

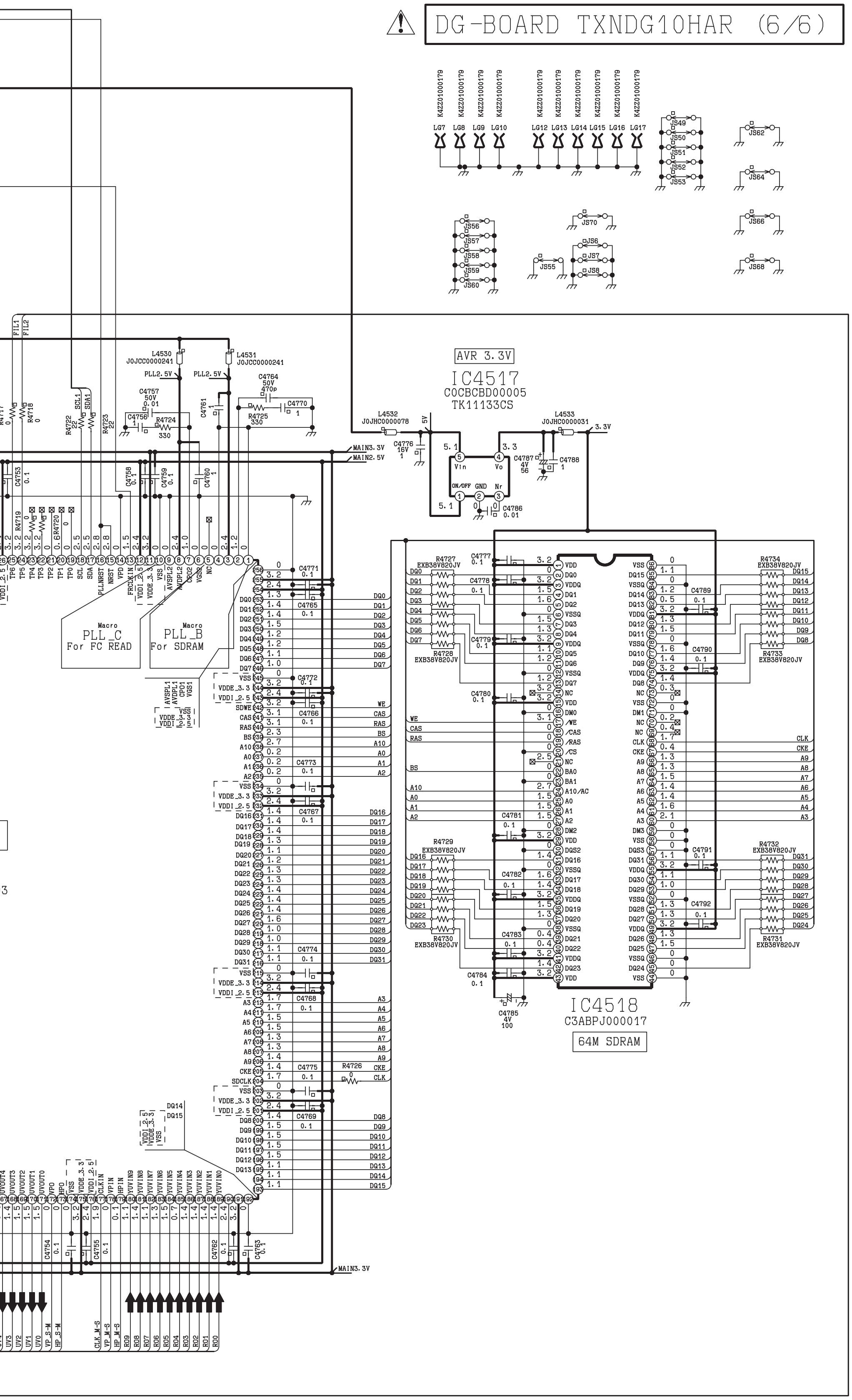

71
72
73
74
75
76
77
78
79
80
81
MAIN2.5V
AVR 2.5V
IC4516
C0CBCAD00007
TK11125CS
L4529
J0JHC0000078
C4743
C4747
C4748
0.01
AVR 3.3V
IC4514
C0CBCBD00005
TK11133CS
L4524
J0JHC0000078
C4702
C4704
C4706
C4707
L4528
J0JHC0000078
R4704
470
R4715
470
C4734
68p
C4735
33p
C4737
0.1
AVR 2.5V
IC4513
C0CBCAD00007
TK11125CS
L4525
J0JHC0000031
C4703
C4705
C4708
C4807
Vin
Vo
ON/OFF
GND
Nr
PLL_A
for FRONT
AD Macro
Macro
PLL_C
For FC REAR
GC2S+
IC4502
C1AB00001703
BSUVIN1
BSUVIN0
BSHPIN
BSVPIN
BSCLKIN
MAIN2.5V
MAIN3.3V
CLK
YUV9
YUV8
YUV7
YUV6
YUV5
YUV4
YUV3
YUV2
YUV1
YUV0
Y9
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
Y0
CLK_S-M
UV9
UV8
UV7
UV6
UV5
UV4
UV3
UV2
UV1
UV0
VP_S-M
HP_S-M
CLK_M-S
VP_M-S
HP_M-S
R4716
56

CT-34WX53

DG-Board(6of6)Schematic Diagram

43
44
45
46
47

DG-BOARD TXNDG10HAR (6/6)

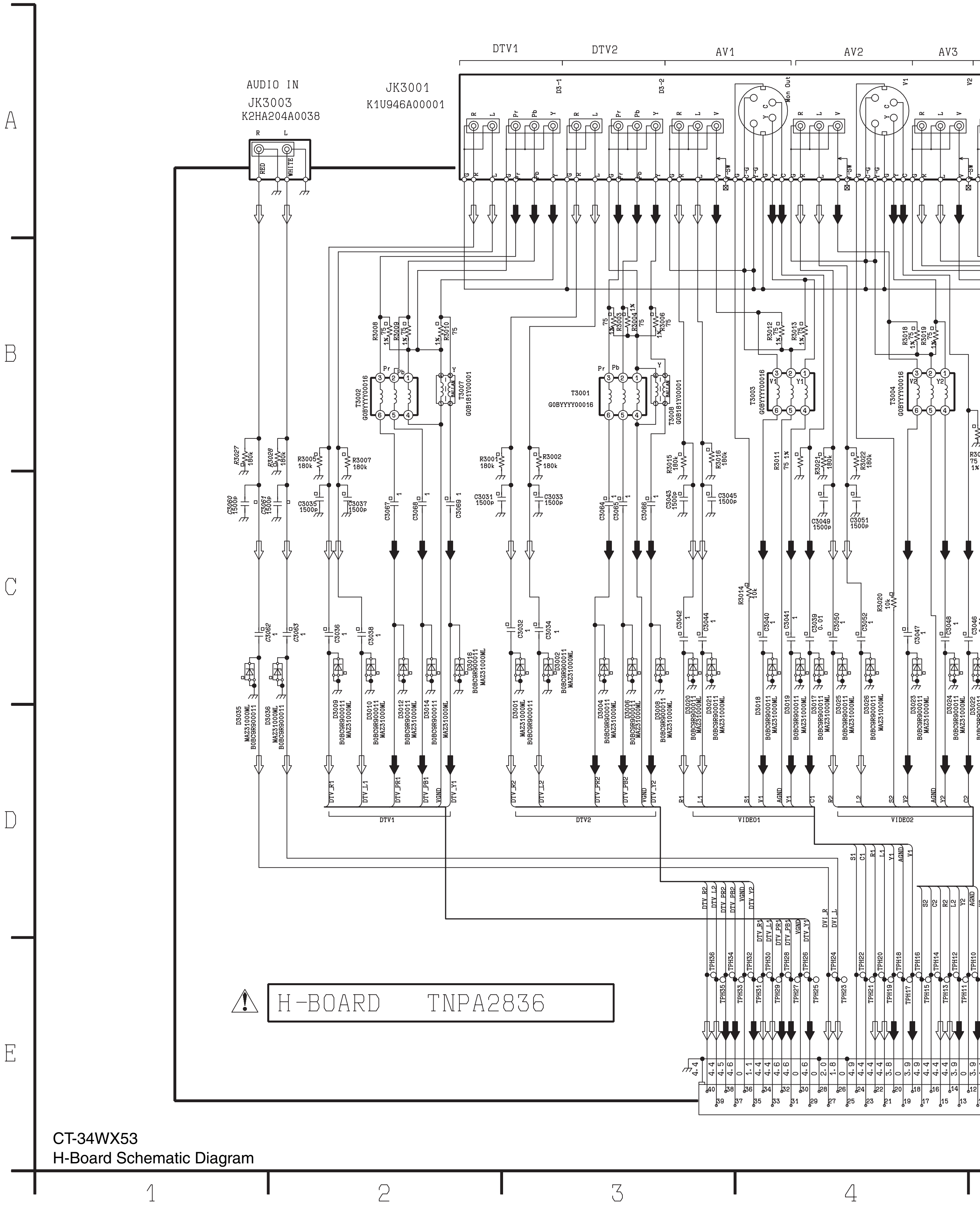


AVR 3.3V
IC4517
C0CBCBD00005
TK11133CS
Vin
Vo
ON/OFF
GND
Nr
L4530
J0JCC0000241
L4531
J0JCC0000241
L4532
J0JHC0000078
L4533
J0JHC0000031
PLL2.5V
MAIN3.3V
MAIN2.5V
3.3V
5V
C4764
C4757
C4756
C4761
C4770
C4776
C4786
C4787
C4788
R4724
R4725
Macro
PLL_C
For FC READ
Macro
PLL_B
For SDRAM
IC4518
C3ABPJ000017
64M SDRAM
R4727
R4728
R4729
R4730
R4731
R4732
R4733
R4734
EXB38V820JV
R4726
C4785
JS49
JS50
JS51
JS52
JS53
JS55
JS56
JS57
JS58
JS59
JS60
JS62
JS64
JS66
JS68
JS70
JS6
JS7
JS8
LG7
LG8
LG9
LG10
LG12
LG13
LG14
LG15
LG16
LG17
K4ZZ01000179

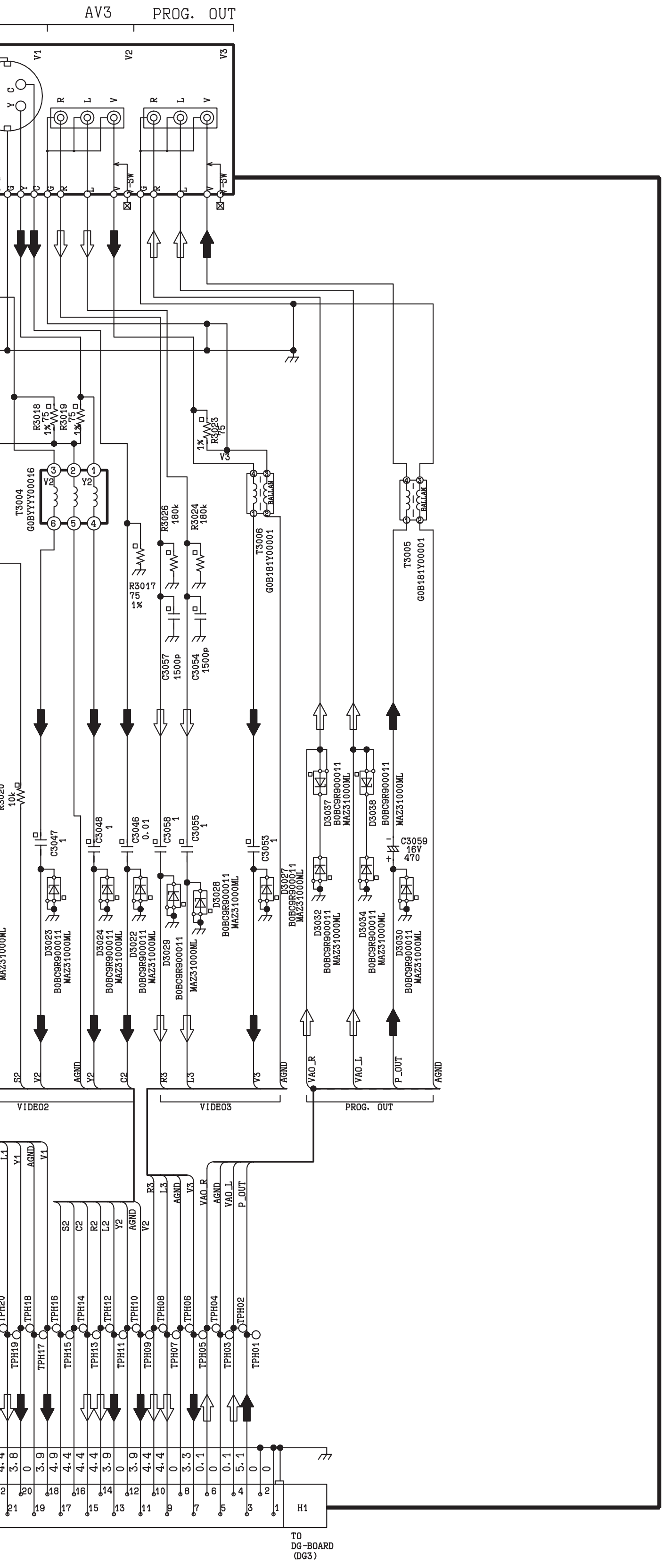
CT-34WX53

DG-Board(6of6)Schematic Diagram

10.14. H-Board Schematic Diagram

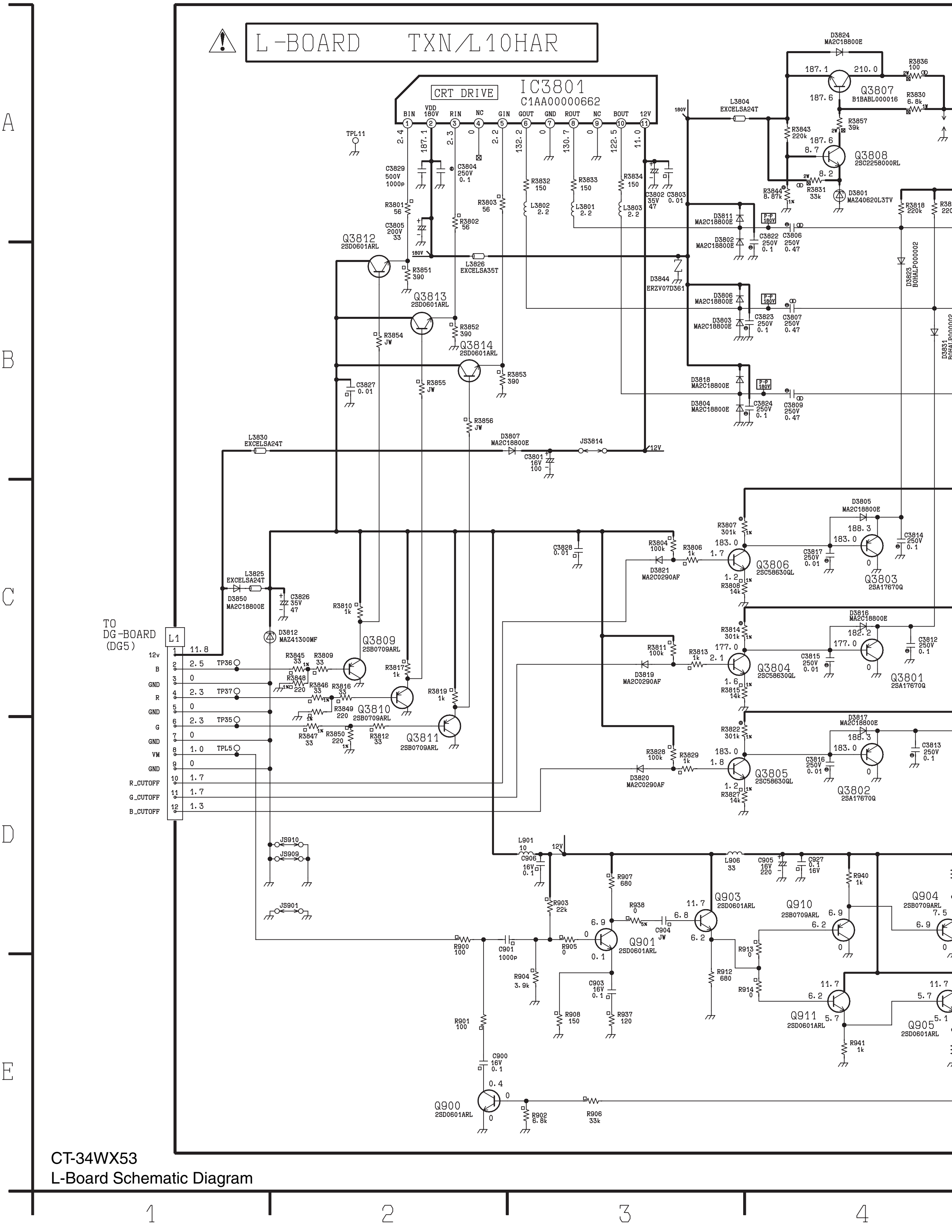

A
B
C
D
E
1
2
3
4
AUDIO IN
JK3003
K2HA204A0038
RED
WHITE
JK3001
K1U946A00001
DTV1
DTV2
AV1
AV2
AV3
D3-1
D3-2
Mon Out
T3002
G0BYYYY00016
T3007
G0B181Y00001
T3001
G0BYYYY00016
T3008
G0B181Y00001
T3003
G0BYYYY00016
T3004
G0BYYYY00016
R3027 180k
R3028 180k
R3005 180k
R3007 180k
R3001 180k
R3002 180k
R3015 180k
R3016 180k
R3021 180k
R3022 180k
R3008 75 1%
R3009 75 1%
R3010 75 1%
R3003 75 1%
R3004 75 1%
R3006 75 1%
R3012 75 1%
R3013 75 1%
R3018 75 1%
R3019 75 1%
R3011 75 1%
R3014 10k
R3020 10k
C3060 1500p
C3061 1500p
C3035 1500p
C3037 1500p
C3031 1500p
C3033 1500p
C3043 1500p
C3045 1500p
C3049 1500p
C3051 1500p
DTV1
DTV2
VIDEO1
VIDEO2
DTV_R1
DTV_L1
DTV_PR1
DTV_PB1
VGND
DTV_Y1
DTV_R2
DTV_L2
DTV_PR2
DTV_PB2
DTV_Y2
DVI_R
DVI_L
H-BOARD TNPA2836

CT-34WX53
H-Board Schematic Diagram

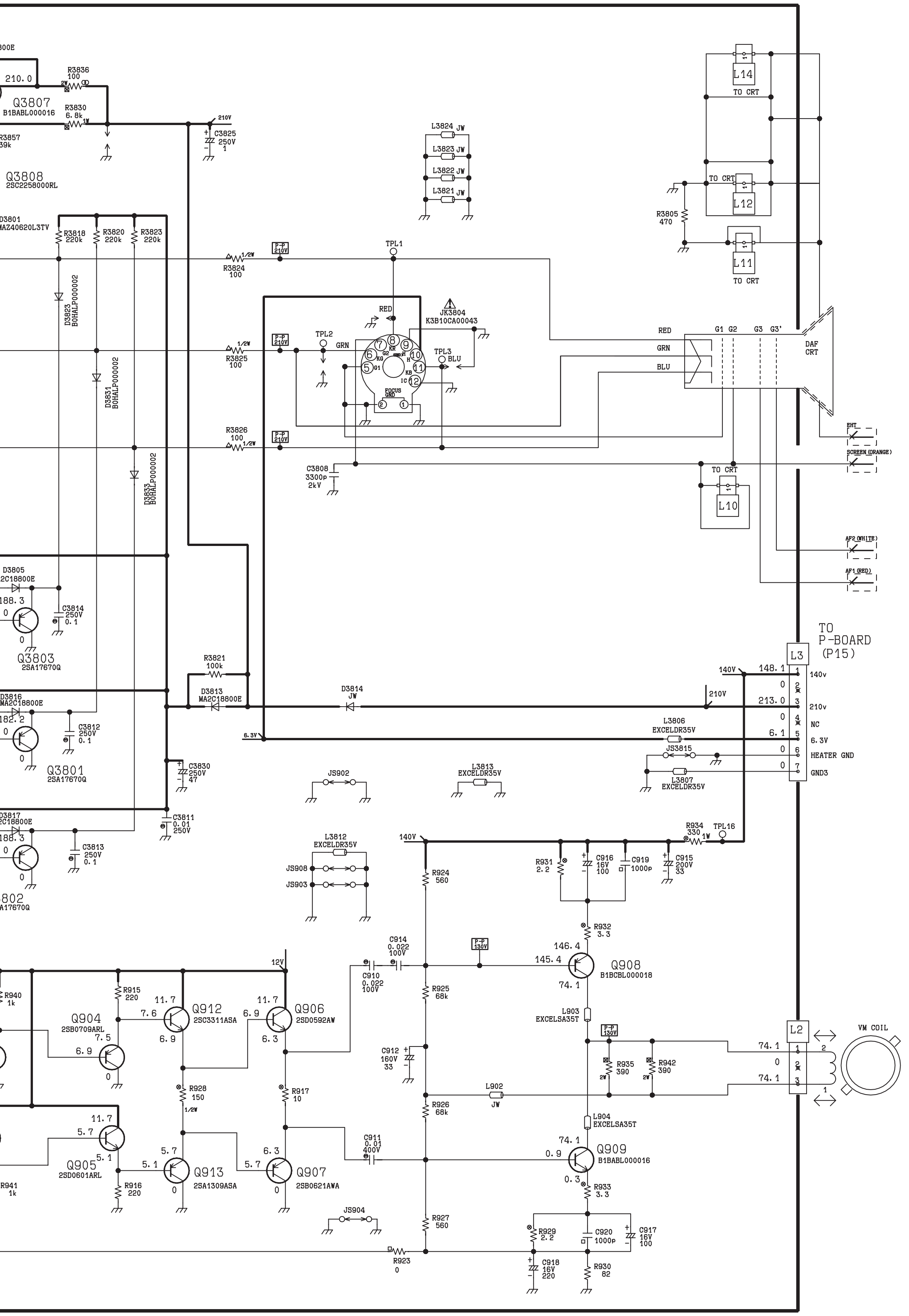

AV3
PROG. OUT
V1
V2
V3
R
L
V
R3018 75 1%
R3019 75 1%
R3023 75 1%
T3004 G0BYYY00016
R3017 75 1%
R3026 180k
R3024 180k
C3057 1500p
C3054 1500p
T3006 G0B181Y00001
T3005 G0B181Y00001
R3020 10k
C3047 1
C3048 1
C3046 0.01
C3058 1
C3055 1
C3053 1
C3059 16V 470
D3023 B0BC9R900011 MAZ31000ML
D3024 B0BC9R900011 MAZ31000ML
D3022 B0BC9R900011 MAZ31000ML
D3029 B0BC9R900011 MAZ31000ML
D3028 B0BC9R900011 MAZ31000ML
D3027 B0BC9R900011 MAZ31000ML
D3032 B0BC9R900011 MAZ31000ML
D3037 B0BC9R900011 MAZ31000ML
D3034 B0BC9R900011 MAZ31000ML
D3038 B0BC9R900011 MAZ31000ML
D3030 B0BC9R900011 MAZ31000ML
VIDEO2
VIDEO3
PROG. OUT
S2
Y2
AGND
C2
R3
L3
V3
VAO_R
VAO_L
P_OUT
TPH01
TPH02
TPH03
TPH04
TPH05
TPH06
TPH07
TPH08
TPH09
TPH10
TPH11
TPH12
TPH13
TPH14
TPH15
TPH16
TPH17
TPH18
TPH19
TPH20
H1
TO DG-BOARD (DG3)
5
6
7

CT-34WX53
H-Board Schematic Diagram

10.15. L-Board Schematic Diagram


L-BOARD TXN/L10HAR
IC3801
C1AA00000662
CRT DRIVE
BIN VDD 180V RIN NC GIN GOUT GND ROUT NC BOUT 12V
Q3807 B1BABL000016
Q3808 2SC2258000RL
Q3812 2SD0601ARL
Q3813 2SD0601ARL
Q3814 2SD0601ARL
Q3806 2SC58630QL
Q3803 2SA17670Q
Q3804 2SC58630QL
Q3801 2SA17670Q
Q3805 2SC58630QL
Q3802 2SA17670Q
Q3809 2SB0709ARL
Q3810 2SB0709ARL
Q3811 2SB0709ARL
Q900 2SD0601ARL
Q901 2SD0601ARL
Q903 2SD0601ARL
Q910 2SB0709ARL
Q904 2SB0709ARL
Q911 2SD0601ARL
Q905 2SD0601ARL
L3804 EXCELSA24T
L3826 EXCELSA35T
L3830 EXCELSA24T
L3825 EXCELSA24T
D3844 ERZV07D361
D3801 MAZ40620L3TV
D3812 MAZ41300MF
TO DG-BOARD (DG5)
L1
12v
B
GND
R
GND
G
GND
VM
GND
R_CUTOFF
G_CUTOFF
B_CUTOFF
TPL11
TP36
TP37
TP35
TPL5
JS3814
JS910
JS909
JS901
A
B
C
D
E
1
2
3
4

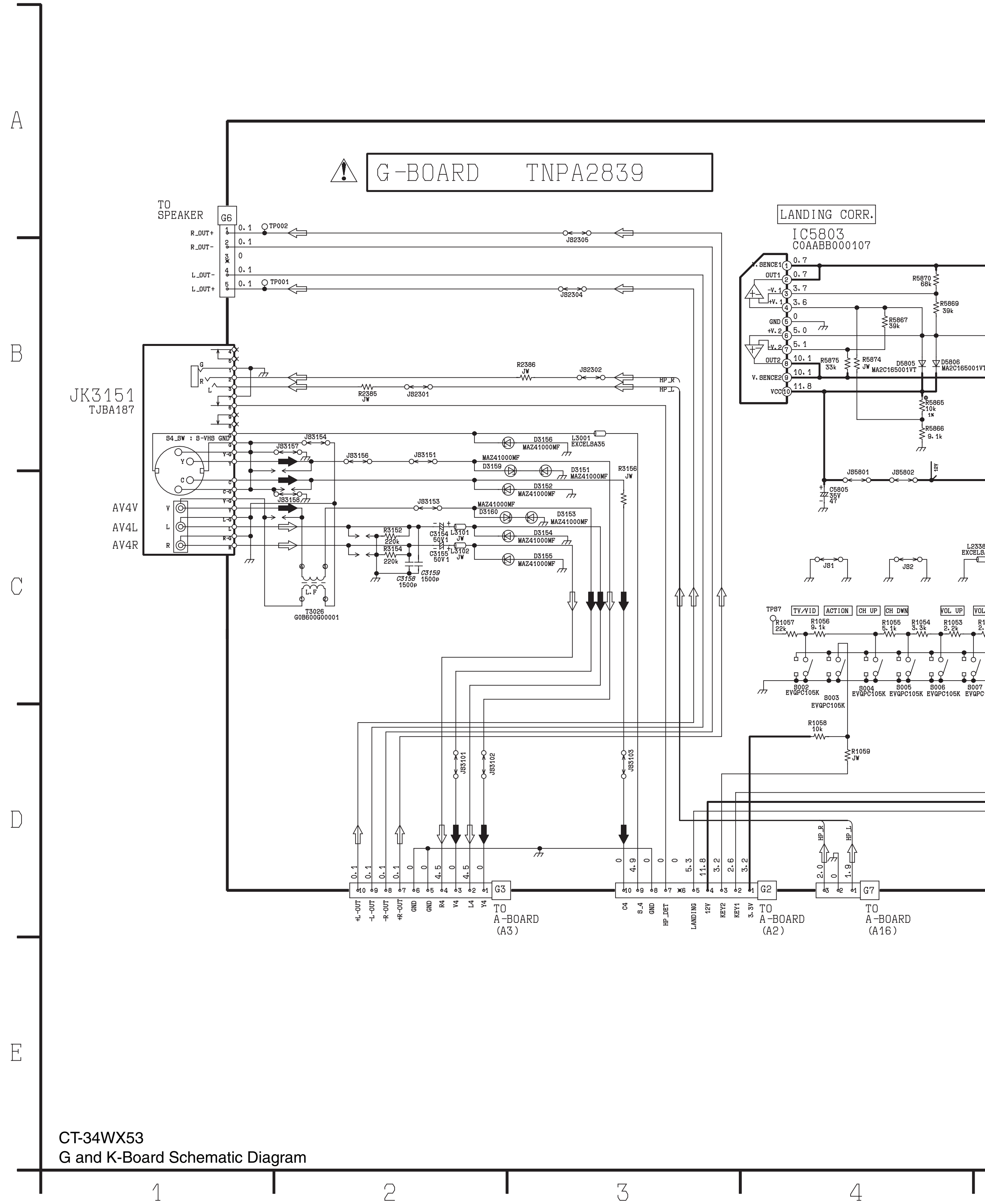
CT-34WX53
L-Board Schematic Diagram


800E
210.0
R3836
100
2W
Q3807
B1BABL000016
R3830
6.8k
1W
210V
C3825
250V
1
R3857
39k
Q3808
2SC2258000RL
L3824 JW
L3823 JW
L3822 JW
L3821 JW
D3801
MAZ40620L3TV
R3818
220k
R3820
220k
R3823
220k
TPL1
P-P
210V
R3824
100
1/2W
D3823
B0HALP000002
D3831
B0HALP000002
D3833
B0HALP000002
RED
JK3804
K3B10CA00043
TPL2
GRN
TPL3
BLU
KR
KG
G2
H
G1
KB
IC
FOCUS
GND
R3825
100
R3826
100
C3808
3300p
2kV
L14
TO CRT
L12
R3805
470
L11
RED
GRN
BLU
G1 G2
G3 G3'
DAF
CRT
EHT
SCREEN (ORANGE)
L10
AF2 (WHITE)
AF1 (RED)
D3805
MA2C18800E
188.3
C3814
250V
0.1
Q3803
2SA1767QQ
TO
P-BOARD
(P15)
L3
R3821
100k
D3813
MA2C18800E
D3814
JW
140V
148.1
0
213.0
0
6.1
0
0
140v
210v
NC
6.3V
HEATER GND
GND3
210V
L3806
EXCELDR35V
JS3815
L3807
EXCELDR35V
6.3V
D3816
MA2C18800E
182.2
C3812
250V
0.1
Q3801
2SA17670Q
C3830
250V
47
JS902
L3813
EXCELDR35V
D3817
MA2C18800E
188.3
C3811
0.01
250V
C3813
250V
0.1
3802
2SA17670Q
L3812
EXCELDR35V
JS908
JS903
140V
R934
330
1W
TPL16
R924
560
R931
2.2
C916
16V
100
C919
1000p
C915
200V
33
R932
3.3
C914
0.022
100V
P-P
130V
146.4
145.4
Q908
B1BCBL000018
74.1
C910
0.022
100V
R925
68k
L903
EXCELSA35T
12V
R940
1k
R915
220
11.7
Q912
2SC3311ASA
11.7
Q906
2SD0592AW
7.6
6.9
Q904
2SB0709ARL
7.5
6.9
6.3
6.9
0
C912
160V
33
P-P
130V
L2
VM COIL
74.1
0
74.1
R935
390
2W
R942
390
2W
R928
150
1/2W
R917
10
L902
JW
R926
68k
L904
EXCELSA35T
11.7
5.7
C911
0.01
400V
74.1
Q909
B1BABL000016
0.9
5.7
6.3
5.1
Q905
2SD0601ARL
5.1
Q913
2SA1309ASA
5.7
Q907
2SB0621AWA
0
0
0.3
R933
3.3
R941
1k
R916
220
JS904
R927
560
R929
2.2
C920
1000p
C917
16V
100
R923
0
C918
16V
220
R930
82

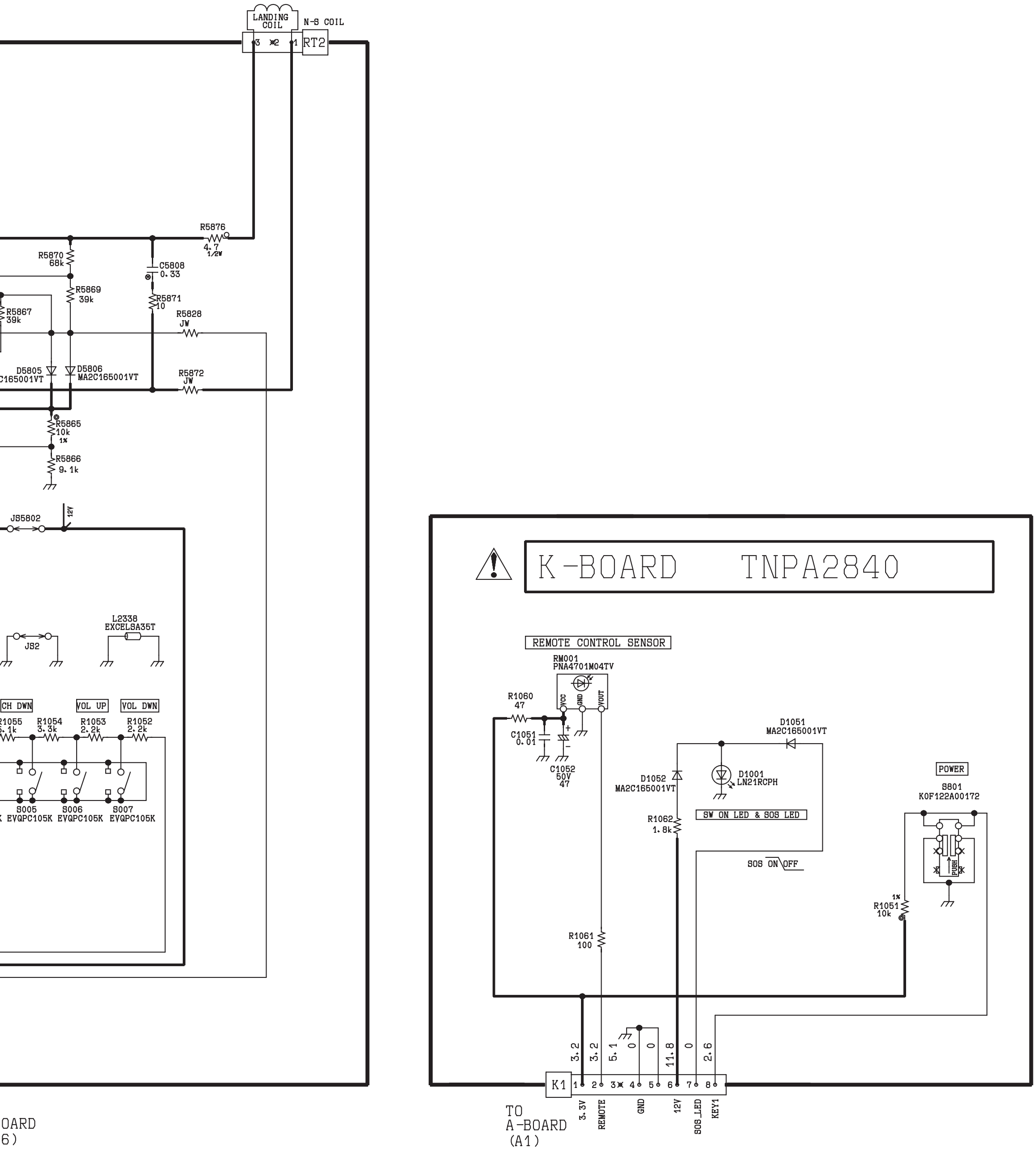
CT-34WX53 L-Board Schematic Diagram

4 5 6 7

10.16. G and K-Board Schematic Diagram


A
B
C
D
E
1
2
3
4
G-BOARD TNPA2839
TO SPEAKER
G6
R_OUT+
R_OUT-
L_OUT-
L_OUT+
TP002
TP001
JS2305
JS2304
JK3151
TJBA187
R2386 JW
JS2302
R2385 JW
JS2301
HP_R
HP_L
S4_SW : S-VHS GND
JS3154
JS3157
JS3156
JS3151
JS3158
JS3153
AV4V
AV4L
AV4R
D3156 MAZ41000MF
L3001 EXCELSA35
D3159
D3151 MAZ41000MF
R3156 JW
D3152 MAZ41000MF
D3160
D3153 MAZ41000MF
R3152 220k
R3154 220k
C3154 50V1
C3155 50V1
L3101 JW
L3102 JW
D3154 MAZ41000MF
D3155 MAZ41000MF
C3158 1500p
C3159 1500p
L.F
T3026 G0B600G00001
JS3101
JS3102
JS3103
G3
TO A-BOARD (A3)
+L-OUT
-L-OUT
-R-OUT
+R-OUT
GND
R4
V4
L4
Y4
C4
S_4
HP_DET
LANDING
12V
KEY2
KEY1
3.3V
G2
TO A-BOARD (A2)
G7
TO A-BOARD (A16)
LANDING CORR.
IC5803
C0AABB000107
V.SENCE1
OUT1
-V.1
+V.1
GND
+V.2
-V.2
OUT2
V.SENCE2
VCC
R5870 68k
R5869 39k
R5867 39k
R5875 33k
R5874 JW
D5805 MA2C165001VT
D5806 MA2C165001VT
R5865 10k 1%
R5866 9.1k
JS5801
JS5802
C5805 35V 47
JS1
JS2
L2338 EXCELS
TPS7
TV/VID
ACTION
CH UP
CH DWN
VOL UP
R1057 22k
R1056 9.1k
R1055 5.1k
R1054 3.3k
R1053 2.2k
S002 EVQPC105K
S003 EVQPC105K
S004 EVQPC105K
S005 EVQPC105K
S006 EVQPC105K
S007
R1058 10k
R1059 JW

CT-34WX53
G and K-Board Schematic Diagram


LANDING COIL
N-S COIL
RT2
R5876
4.7
1/2W
R5870
68k
C5808
0.33
R5869
39k
R5871
10
R5867
39k
R5828
JW
D5805
C165001VT
D5806
MA2C165001VT
R5872
JW
R5865
10k
1%
R5866
9.1k
JS5802
12V
L2338
EXCELSA35T
JS2
CH DWN
VOL UP
VOL DWN
R1055
.1k
R1054
3.3k
R1053
2.2k
R1052
2.2k
S005
EVQPC105K
S006
EVQPC105K
S007
EVQPC105K
OARD
6)
K-BOARD TNPA2840
REMOTE CONTROL SENSOR
RM001
PNA4701M04TV
VCC
GND
VOUT
R1060
47
C1051
0.01
C1052
50V
47
D1051
MA2C165001VT
D1052
MA2C165001VT
D1001
LN21RCPH
SW ON LED & SOS LED
R1062
1.8k
SOS ON OFF
POWER
S801
K0F122A00172
PUSH
1%
R1051
10k
R1061
100
3.2
3.2
5.1
0
0
11.8
0
2.6
K1
1 2 3 4 5 6 7 8
3.3V
REMOTE
GND
12V
SOS_LED
KEY1
TO
A-BOARD
(A1)

CT-34WX53
G and K-Board Schematic Diagram

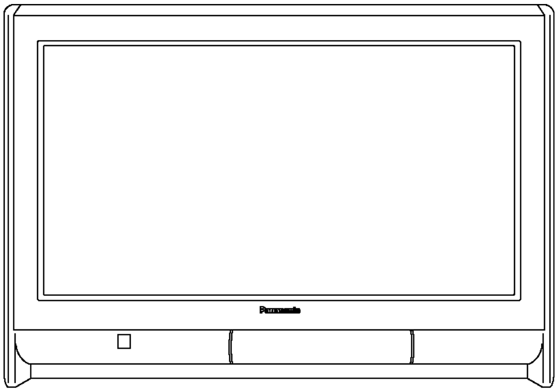
Order No. ITD0306011C1
B19 Canada : B5

Service Manual

Wide Screen TV / HDTV Monitor

CT-34WX53

DX4W Chassis



Specifications

Power Source	AC120V, 60 Hz
Power Consumption:	
Average use 165 W (Maximum Current: 3.7 A)	
Stand-by condition: 0.2 W	
CRT	
34 inch, 16:9 aspect ratio	
Screen size	
29.33” (745.0mm)(W)x16.50” (419.0mm)(H)x33.65”(854.7mm)(D)	
Dimension (WxDxH)	
35.31” (897mm)x25.35” (644mm)x23.15” (588mm)	
Weight (Mass)	
175 lbs (79.5kg) Net	
ANODE Viltage	30.5 ± 0.3kV at zero beam current
Channel Capability-181	
	VHF-12: UHF-56: Cable-125
Sound	
Speaker	2 Speakers
Audio out	30W (15W+15W) (10% THD)
Headphones	M3 (3.5mm) Jack×1
FEATURES	
Two screen display function	3D Y/C FILTER
BBE VIVA	LINEAR PIP
CLOSED CAPTION	V-Chip
Accessories Supplied	Remote conrtol Transmitter EUR7603ZD0
	AA Battery ×2 Size
Operating Conditions	

Temperature: 34°F - 104°F (0° - 40°C)

Humidity: 20% -80% (non-condensing)

Connection terminals	
AV INPUT 1-4	VIDEO 1.0 Vp-p (75Ω) (Phono Jack Type) S-VIDEO Y:1.0Vp-p (75Ω) (Mini DIN 4-pin) C: 0.286 Vp-p (75Ω) AUDIO L-R 0.5Vrms (Phono Jack Type x 2)
AV PROG OUT	VIDEO 1.0Vp-p (75Ω) (Phono Jack Type) AUDIO L-R 0.5 Vrms (Phono Jack Type x2)
TO AUDIO AMP	AUDIO L-R 0.5 Vrms (Phono Jack type x2)
COMPONENT VIDEO	
INPUT1-2	Y 1.0 Vp-p (including synchronization) P_B/P_R ± 0.35 Vp-p AUDIO L-R 0.5 Vrms (Phono Jack Type x 2)
DIGITAL IN INPUT	
	DVI 1.0 24 pin
	AUDIO L-R 0.5 Vrms
	(Phono Jack Type × 2)

Design and Specifications are subject to change without notice.

Weight and Dimensions shown are approximate.

Panasonic®

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precautions

1.1. General Guidelines

1. It is advisable to insert an isolation transformer in the AC power line before servicing a hot chassis.
2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations, are properly installed.
4. Before switching the power on, measure the resistance between B+ line and cold side chassis ground. Connect the "-" side of an ohmmeter to the B+ line, and the "+" side to chassis ground. Each line must have more resistance value than the specified one as follows:

B+ line	TEST POINT	SPECIFICATION
MAIN 9V	TPA7	9.0V±0.5V
MAIN5V	TPA8	5.2V±0.3V
GC 2.5V	TPA9	2.7V±0.2V
STBY 3.3V	TPA16	3.3V±0.2V
STBY7V	TPP9	6.1±0.5V
+B2	TPD11	147.0V±3.0V
30V	TPD30	30V±2.0V
15V	TPD31	15.0V±1.5V
-15V	TPD151	-16.5V±1.5V
SOUND+	TPD160	18.0V±1.5V
210V	TPD34	212V±4.0V
MAIN12V	TPD6	12.0V±0.5V
SOUND+	TPP22	18.0V±1.5V
30V	TPP19	30V±2.0V
15V	TPP20	15.0V±1.5V
-15V	TPP21	-16.5V±1.5V
+B ①	TPP15	148V±3.0V
+B ②	TPP140	148V±3.0V
212V	TPP210	212V±4.0V

5. When the set is not used for a long period of time, unplug the AC power cord plug from the AC line outlet.
6. High voltage points, as high as 30.5 ± 0.3 kV, are present when the set is in operation. Operating the set without the rear cover involves in a dangerous electrical shock from the set power supply. Servicing must not be attempted by anyone who is not thoroughly familiar with the necessary precautions when working on high voltage equipment. Always discharge the anode of the picture tube to chassis ground before handling the picture tube.
7. After servicing, make the following leakage current checks to prevent the customer from dangerous electrical shock.

1.2. Leakage Current Cold Check

1. Unplug the AC power cord and short between the two prongs of the AC plug with a jumper wire.
2. Set the power switch of this set to ON position.
3. Measure the resistance value with an ohmmeter between the shorted AC plug and each exposed metallic part of the set cabinet such as screwheads, connectors, and control shafts. When the exposed metallic part has a return path to the chassis, the reading should be more than 1 MΩ.
When the exposed metal part does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check (See Fig.1)

1. Plug the AC power cord directly into the AC line outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10W resistor, in parallel with a 0.15μF capacitor between each exposed metallic part of the set and an earth ground such as a water pipe.
3. Use a high impedance AC voltage meter to measure the voltage across the resistor.
4. Measure the voltage at each exposed metallic part.
5. Reverse the AC plug inserting direction at the AC line outlet and repeat each of the above measurements.
6. The voltage at any point must be less than 0.75Vrms.
7. A leakage current tester (Symptom Model 229 or the equivalent) may be used to make the hot checks. In this case, the current must be less than 500μA.
8. If the reading is more than the above value, the set must be repaired and rechecked before it is returned to the customer because of a possibility of an electrical shock.

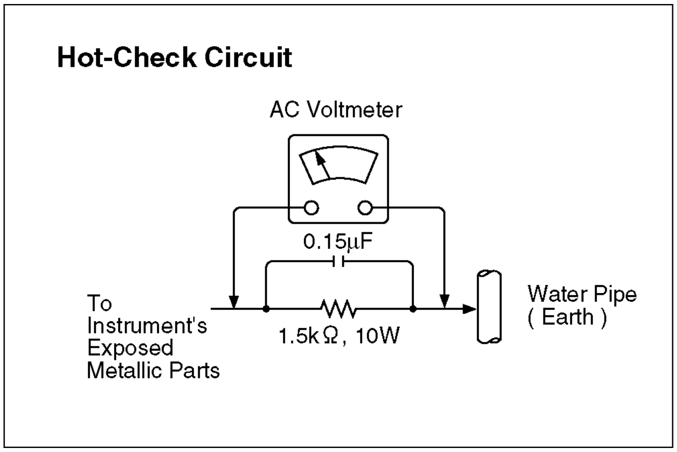


Fig. 1

1.4. X-Radiation

Warning:

1. The potential sources of X-Radiation in the monitor set are the high voltage section and picture tube.
2. When using a picture tube test jig for service, make sure that jig is capable of handling 30.5 kV without causing X-Radiation.
3. For continued X-radiation protection, in case that at least one of the components listed below is replaced, follow the adjustment procedure of the high voltage circuit. Precise adjustment is necessary for Serviceman Mode to protect X-Radiation. Refer to "High Voltage and X-Radiation Protective Circuit Adjustment section".

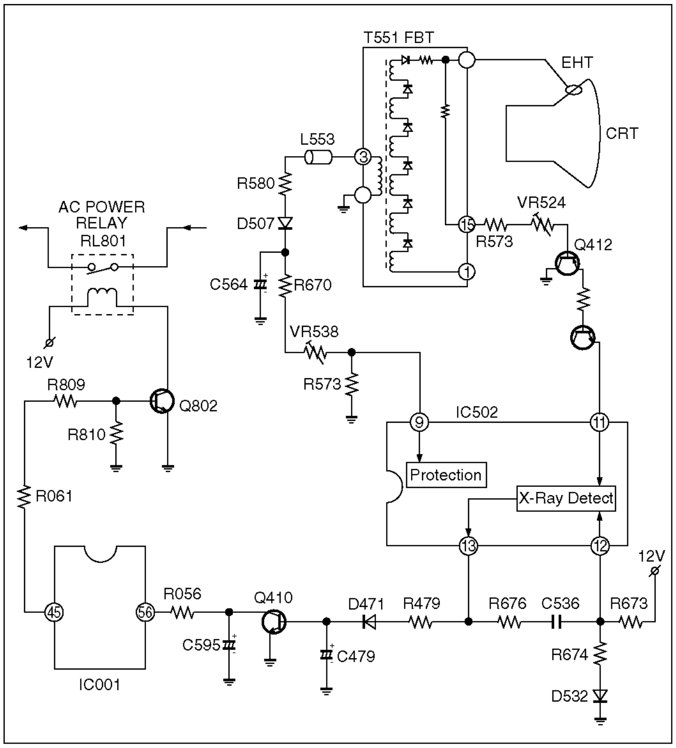
T551, IC1501, IC4002, D512, D1503, R520, R521, R522, R809, R810, R1506, R4081, R4084, R1505, R1515 C481, C528, C1506, C1507, RL801

1.5. Hold Down or Safety Circuit Information

To monitor the high voltage, the positive DC voltage from the cathode D512 is applied through R1507 and other resistors to pin 3 of IC1501, which is the input terminal of the X-ray Protection Circuit. The voltage at pin 2 of IC1501 is 5.90 ± 0.03 voltage. Under normal conditions this voltage is insufficient to activate the X-ray Protection Circuit.

If the voltage at pin 3 of IC1501 increases over the voltage at pin 2 of IC1501 increases and causes the X-ray Protection to activate. Then it causes the shut down works.

In the process described above, the voltage at pin 3 of IC1501 is compared with the voltage at pin 2 of IC1501.if excessive beam current is drawn, the voltage at pin 3 of IC1501 increases. When the voltage at pin 3 of IC1501 over the voltage at pin 2 of IC1501, the voltage at pin 1 of IC1501 becomes "high" and feeds into pin 45 of micro-controller IC4002 through R4084.The micro-controller then turns off Q802, causes the AC power relay RL801 to unlatch and turns off the receiver.


T551 FBT
EHT
CRT
L553
R580
3
1
15
D507
C564
R670
VR524
R573
Q412
AC POWER
RELAY
RL801
12V
VR538
R573
R809
Q802
R810
IC502
9
11
Protection
X-Ray Detect
R061
13
12
12V
45
56
IC001
R056
Q410
C595
D471
R479
C479
R676
C536
R673
R674
D532

1.6. Service Instruction: Procedure to apply silicone to the seal control VR538 and VR524

Purpose

To prevent any adjustment on the sealed control after final adjustment is done at factory. If the sealant are removed for any reason, the control is damaged at same time.

Material

1. Silicone-Type T8C1710201H, manufactured by Shin-Etsu
   Chemical Co., Ltd. (Japan)
2. Hard ABS tube-Type TMMX004

Tools

No tool is required.

Procedures

1. Place the hard ABS tube on the designated sealed control, as shown in Figure a.

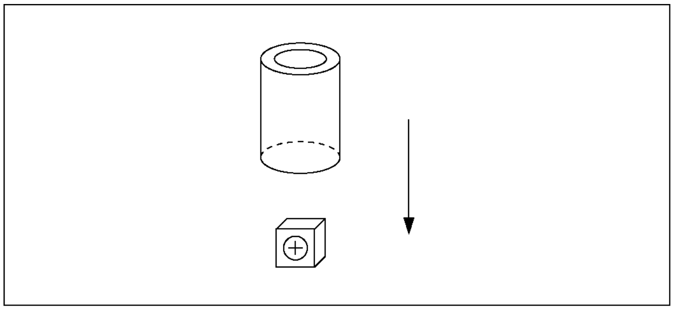


Figure a.

2. When the tube is gently pressed all the way down and adhere to the P.C.B., apply the silicon into the hard ABS tube and form hemisphere like object on the top of tube, as shown in Figure b.

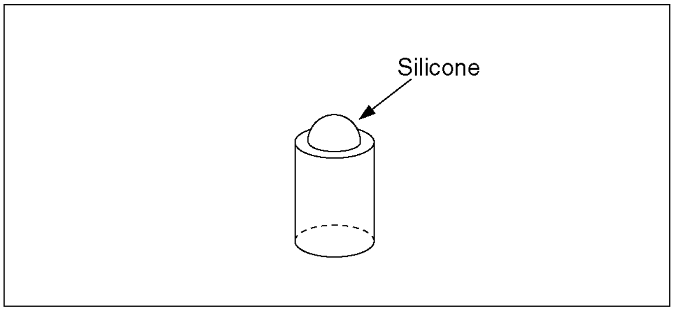


Figure b.

2 Service Hints

2.1. Before servicing

(1) Remove the screws fixing the rear cover (14 pcs.: Refer to Fig. 1).

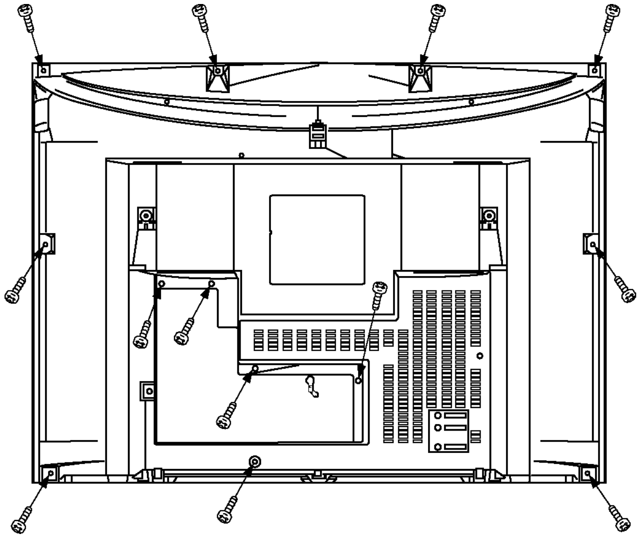


Fig. 1 Position of the screws fixing the rear cover

(2) Remove the rear cover by raising the chassis a little and pulling to the rear . (Refer to Fig. 2.)

- At this time, disconnect the coupler P11, the ring clamper, etc. as required to facilitate the pulling out of the chassis.
- After completion of servicing, any disconnected couplers and clampers must be restored to their original condition.

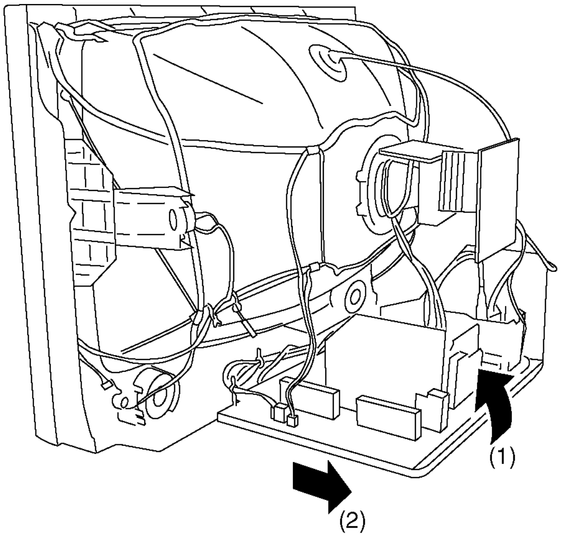


Fig. 2 How to tilt the chassis

2.2. In regard to inspection of A-Board and D-Board

The A-Board and D-Board can be inspected from the pattern side when the chassis is pulled out and tilted up. (Refer to Fig. 3.)

At this time, disconnect the coupler, the clamp, etc. as required to facilitate tilting of the chassis.

When tilting the chassis, pay sufficient attention to the L-Board at the neck of the picture tube

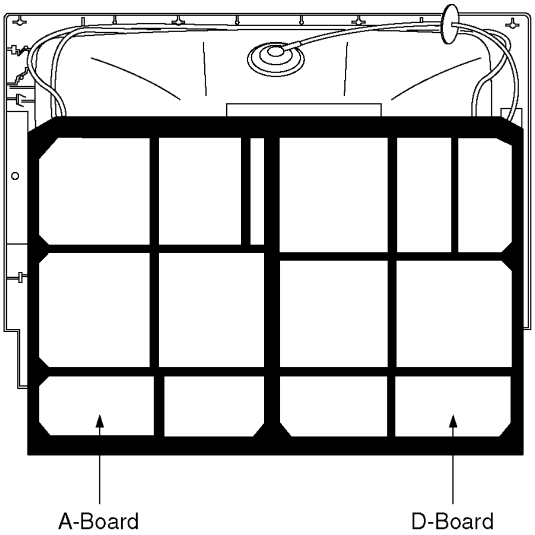


Fig. 3 Inspection of the A-Board and D-Board

3 About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and (Cu) although other types are available.

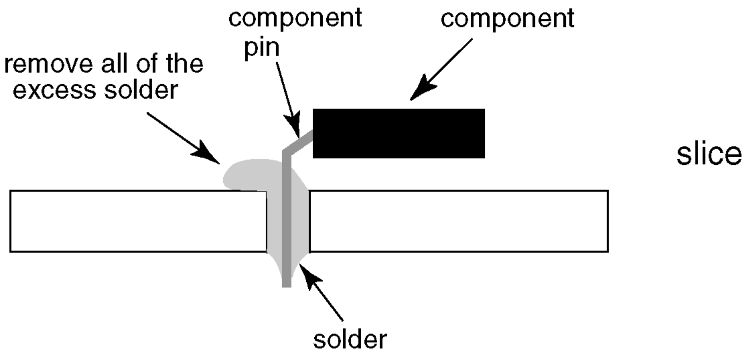
This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol PbF stamped on the back of PCB.

Caution

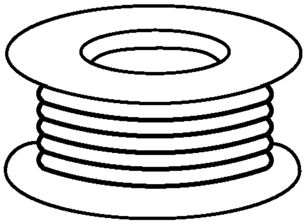
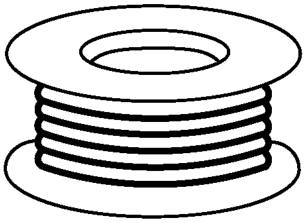
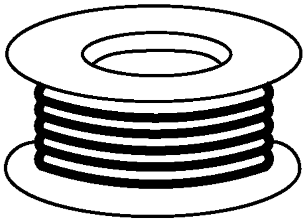
- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30 ~ 40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).

  If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)

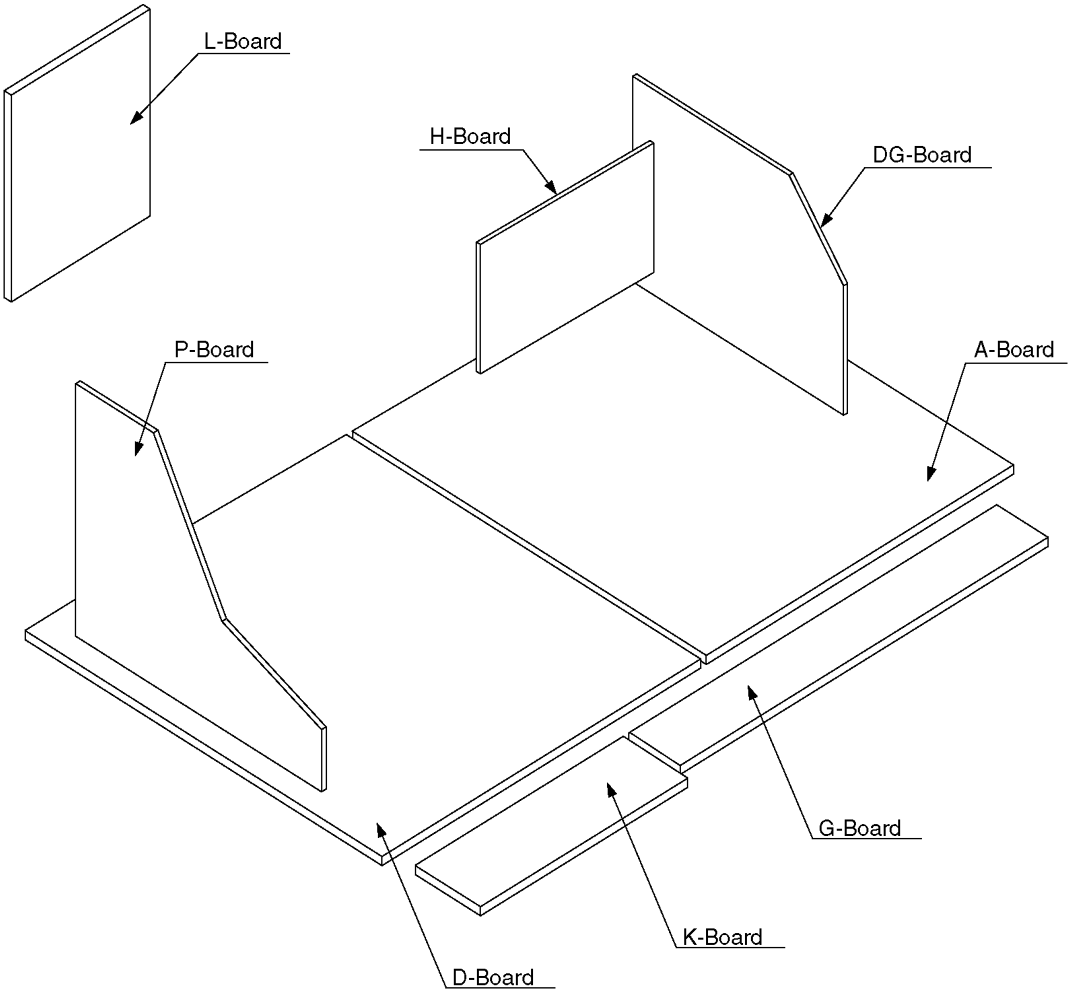


Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

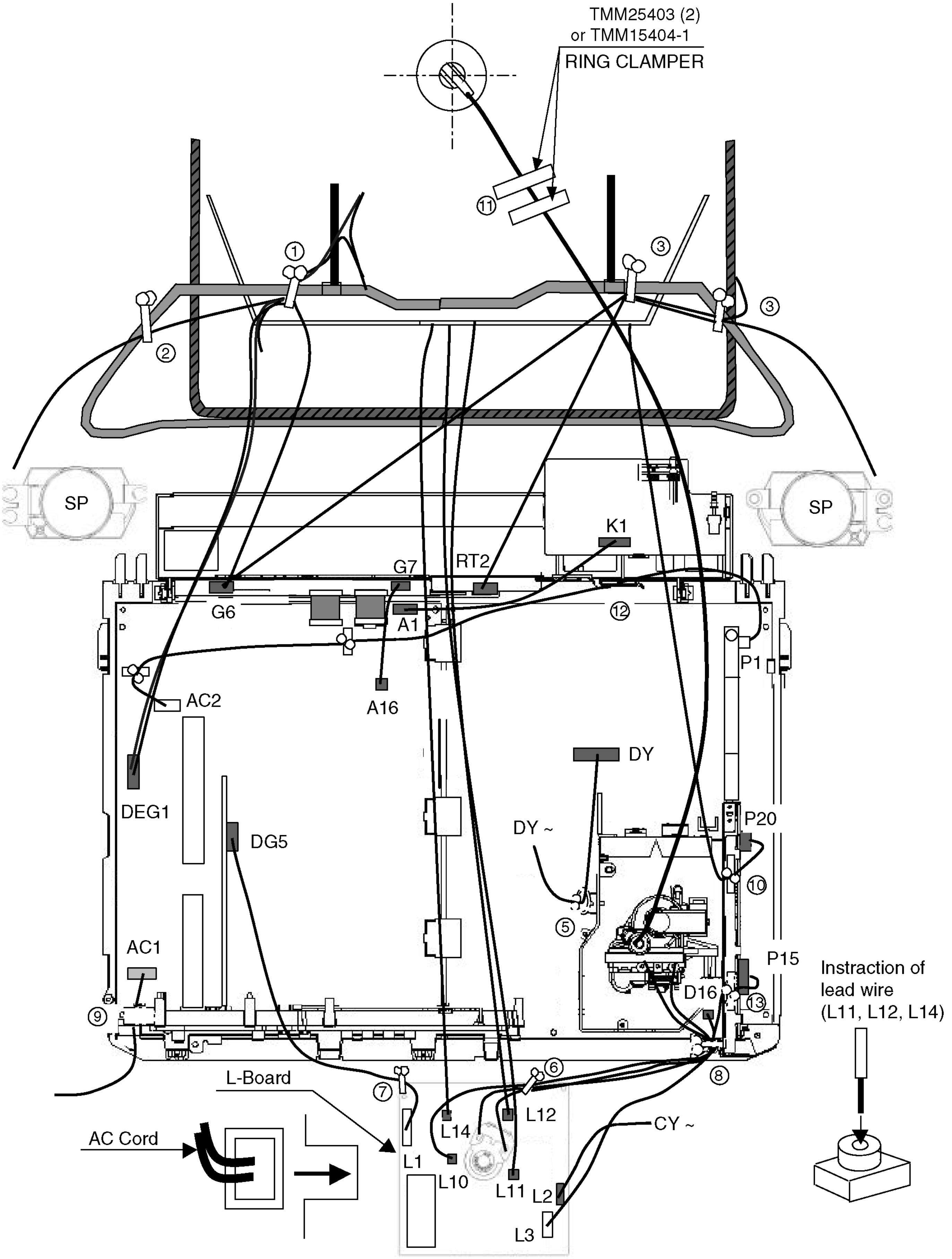
0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

4 Chassis Board Layout


L-Board
H-Board
DG-Board
P-Board
A-Board
G-Board
K-Board
D-Board

Board Name	Designation
G-Board	Front terminal
K-Board	LED/Main Power SW/RM
L-Board	CRT Drive
P-Board	AC Power
D-Board	Power Deflection
A-Board	AUDIO, AV SW
DG-Board	Digital Core, MPU
H-Board	Rear terminal

5 Location of Lead Wiring


TMM25403 (2)
or TMM15404-1
RING CLAMPER
⑪
①
③
③
②
SP
SP
K1
G7
RT2
G6
A1
⑫
P1
AC2
A16
DY
DEG1
P20
DY ~
DG5
⑩
⑤
AC1
P15
D16
⑬
⑨
⑧
⑥
L-Board
⑦
L12
CY ~
L14
AC Cord
L1
L10
L11
L2
L3
Instraction of
lead wire
(L11, L12, L14)

Connect Connector

DY, DEG1, G6, Anode, CRT GND (L11) (L12) (L14), L2, L3,
AC1, RT2, D16, P20, G6, Fo/Sc (FBT), DG5, A16, G7, A1, K1

Clamper

Clamper Lead Wiring	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭
DY					●									
ANODE LEAD											●			
G6~SP(L)			●	●										
DEG COIL~DEG1	●													
L10~D16						○		●						
G6~SP(R)	●	●												
Fo, Sc						○		●					●	
L3~P15								●						
AC									●					
DEG COIL~RT2			●	●										
DG5~L1							○							
CRT GND~P20										●				
AC2~P1												●		

<<CAUTION POINT>>

1. The leads should not be too close to the anode leads.
   (Be separated at least 10mm.)
2. The anode leads should be separated at least 10mm from the CRT, Back Cover, DY, Circuit Board and so on.
3. The focus screen lead should not touch CY fixed screw.

6 Serviceman Mode (Electronic Controls)

This Receiver has electronic technology using the I^{2}C BUS Concept. It performs as a control function and it replaces many mechanical controls. Instead of adjusting mechanical controls individually, many of the control function are now performed by using “On Screen Display Menu”. (The **Serviceman Adjustment Mode**.)

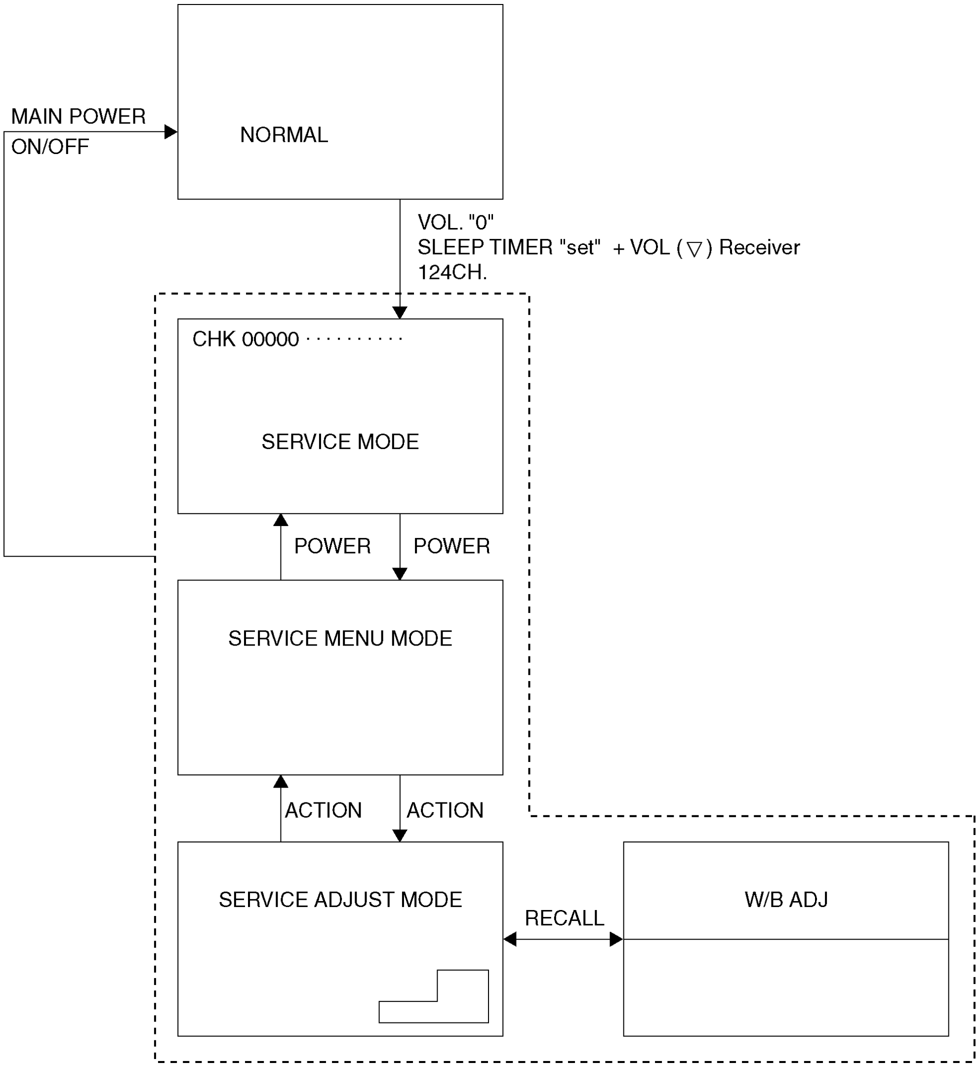
Note

It is suggested that the technician reads all the way through and understand the following the procedure for Entering/Exiting the **Serviceman Mode**; then proceed with the instructions working the Receiver. When becoming familiar with the procedure, the Flow Chart for Serviceman Mode may be used as a quick guide.

Quick Entry to Serviceman Mode:

At times when minor adjustments need to be done to the electronic controls, the method of Entering the serviceman Mode without removal of the cabinet back is as follows using the Remote Control:

1. Select SET-UP icon and select CABLE mode.
2. Select TIMER icon and set SLEEP time for 30 Min.
3. Press ACTION button twice to exit menus.
4. Tune to the Channel 124.
5. Adjust VOLUME to minimum (0).
6. Press the VOL ◀ button (decrease) **on Receiver**. Red “CHK” appears in upper corner.

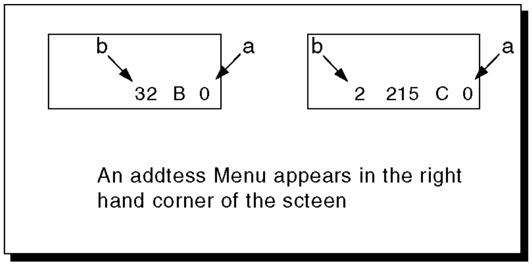

MAIN POWER
ON/OFF
NORMAL
VOL. "0"
SLEEP TIMER "set" + VOL (▽) Receiver
124CH.
CHK 00000 ··········
SERVICE MODE
POWER
POWER
SERVICE MENU MODE
ACTION
ACTION
SERVICE ADJUST MODE
RECALL
W/B ADJ

To toggle between Aging and Serviceman modes:

While the “CHK” is displayed on the left top corner of the screen, pressing the Action and the Volume up button on the Receiver simultaneously will toggle between the modes. Red “CHK” for Serviceman and yellow “CHK” for Aging.

7. Press the Power Button on the Remote Control to select one of six Serviceman Adjustment Modes.
    a. Serviceman MTS ADJUSTMENT.
    b. Serviceman CLOCK ADJUSTMENT.
    c. Serviceman VIDEO ADJUSTMENT.
    d. Serviceman HDEF ADJUSTMENT.
    e. Serviceman VDEF ADJUSTMENT.
    f. Serviceman DAF ADJUSTMENT.
    g. Serviceman OTHER ADJUSTMENT.

Note: *Only the applicable settings for the Receiver serviced will be available (See a in Fig.1).*



An addtess Menu appears in the right hand corner of the scteen

Figure 1. **Serviceman Mode Menu Adjustments.**

Exiting the Serviceman Mode:

Press the **Power** buttons on the **Receiver.**

For Adjustments:

1. **Press Channel Up/Down** on the **Remote Control** to select one of the available Service Adjustments (**a** in Fig.1).

    Note:

    Write Down the original value set (**b** in Fig.1) for each address before modifying anything. It is easy to erroneously adjust the wrong item.

2. **Press Volume Up/Down** on the **Remote Control** to adjust the level of the selected Service Adjustment (**b** in Fig.1).

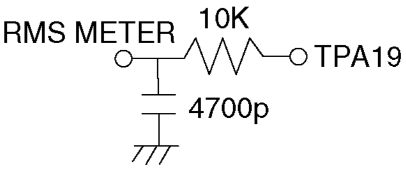
MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
			SLEEVE	SUB	
MTS	MTSIN	00	12		21
	SEPA L	00	13		06
	SEPA H	00	14		19
CLOCK	CLOCK	00	15		128
	AREA	13	D3		ALL
	IN ▶ EX	13	D4		
	EX ▶ IN	13	D5		
VIDEO	COLOR	00	16		1F
	TINT	00	17		00
	BRIGH	00	1E	0A	00
	CONT	00	22	02	00
	B-Y_G	00	18		40
	CUT_G	00	26	01	F7
	CUT_R	00	2C	01	93
	CUT_B	00	2F	01	96
	BRT	00	A5	0A	05
	R DR	00	44		95
	B DR	00	45		8B
	R-Y-A	00	19		00
HDET	H LIN	00	46		80
	H POS	00	A8		4B
	H WID	00	4E		65
	PCC	00	51		55
	PCCHG	00	55		41
	PCCLG	00	59		36
	PCCHS	00	60		08
	PCCLS	00	61		03
	TOPG	00	66		A5
	BTMG	00	65		9F
	TOPSL	00	6D		04

MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
	BTMSL	00	71		03
	TRAP	00	75		82
	PARA	00	7C		11
	SIDE	00	7D		12
V-DEF	V RAS	00	84		39
	VEAMP	00	85	01	44
	V-C	00	8D		83
	V-S	00	91		50
DAF	HDAFS	00	95		17
	VDAFG	00	96		3E
OTHER	EW_SW	00	9B		00
	VTOP	00	A3		AE
	SOSSW	01	92		01

7 Adjustment

7.1. MTS Adjustment

7.1.1. Input level Adjustment

Instrument name	Connection	Remarks
1. Filter jig 2. 2 RF signal generator 3. RMS voltage meter 4. Measurement computer	TPA19-GND or R2208-GND RF ANT. INPUT Filter jig SCL2, SDA2, FA2	

Procedure	Remarks
1. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,100% modulation ,monaural (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** Make sure 75us PRE-EMPHASIS is off. 2. Adjust "MTSIN" data (Input level) until the RMS voltage meter indicates 106mVrms ± 6mVrms.	

7.1.2. STERO Sep. Adjustment

Instrument name	Connection	Remarks
1. RF signal generator 2. Oscilloscope 3. Measurement computer	RF ANT. INPUT TPA20-GND or R2209-GND SCL2, SDA2, FA2	

Procedure	Remarks
1. Select STEREO mode in the AUDIO Menu. 2. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB ,75Ω OPEN ,P/S 10dB) **Note:** After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on. 3. Adjust "SEPAL" data (Low-level separation) until the amplitude. 4. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 3kHz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB, 75Ω OPEN, P/S 10dB) **Note:** After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on. 5. Adjust "SEPAH" data (High-level separation) until the amplitude of the waveform on the oscilloscope is minimum. 6. Repeat steps 2. to 5. until Low-level separation and High-level separation satisfy above-mentioned conditions.	The separation must be more than 20 dB at 300Hz and 3kHz.

7.2. Clock Adjustment

Instrument name	Connection	Remarks
1. Frequency counter	R003-GND (A-PWA)	

Procedure	Remarks
1. Select the "CLOCK" at SERVICE-MAN MENU. 2. Measure R003 for frequency. 3. Set "CLOCK" database on following formula. DATA = $128 + 0.45 \times 10^6 \times (732.4220 - F) / 732.4220$	

7.3. Sub contrast Adjustment (NTSC)

Preparation

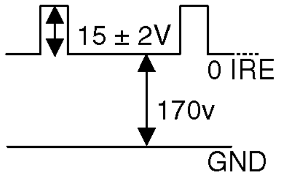
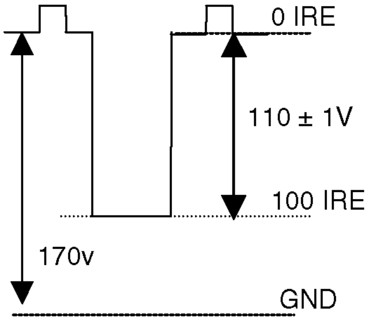
Picture mode : VIVID (NORMAL SET)
Adjustment data : BRIGH, CONT

ACL	OFF
WHITE CHARACTER CORRECTION	OFF
COLOR	OFF
VPK (V contour)	OFF
DSC	OFF
AI	OFF
DC TRANSMISSION QUANTITY CORRECTION	OFF

These data are set up when push a "R-TUNE" key.

∗ Don't operation ABL circuit when adjust sub contrast.

Instrument name	Connection	Remarks
1. Oscilloscope 2. Adjustment check RACK 3. Measurement computer	KG CHASSIS SCL1, SDA1, FA2	

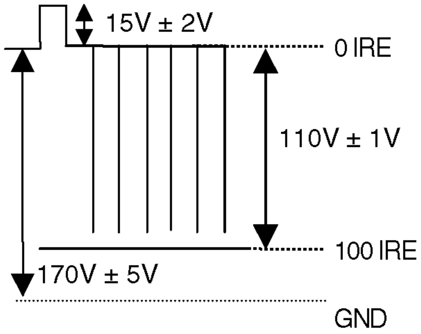
Procedure	Remarks
1. Apply a studio color bar. 2. Set "BRIGH" data to "9-90"h. 3. Adjust "CUT G" data to obtain 170V between 0IRE and GND level at KG. 4. Adjust "CONT" data to obtain 110 ± 1V between 0IRE and 100IRE at KG.	< stdio color bar >  Fig. 1 < stdio color bar >  Fig. 2

7.4. Sub contrast Adjustment (HDTV)

Preparation
Picture mode : VIVID (NORMAL SET) Adjustment data : BRIGH, CONT

ACL	OFF	These data are set up when push a "R-TUNE" key.
WHITE CHARACTER CORRECTION	OFF	
COLOR	OFF	
VPK (V contour)	OFF	
DSC	OFF	
AI	OFF	
DC TRANSMISSION QUANTITY CORRECTION	OFF	

Instrument name	Connection	Remarks
1. Oscilloscope 2. Adjustment check RACK 3. Measurement computer	KG CHASSIS SCL1, SDA1, FA2	

Procedure	Remarks
1. Apply a studio color bar. 2. Set "BRIGH" data to "9-90"h. 3. Adjust "CUT G" data to obtain 170V between 0IRE and GND level at KG. 4. Adjust "CONT" data to obtain 110 ± 1V between 0IRE and 100IRE at KG. 5. Set “BRIGH” data to “9-B0”h.	< HD crosshatch pattern >  15V ± 2V 0 IRE 110V ± 1V 100 IRE 170V ± 5V GND

7.5. Color output Adjustment (NTSC)

Instrument name	Setting	Remarks
1. RF signal generator	Picture mode : NTSC Adjustment item : Sub Adjustment Picture menu : Dynamic Picture pattern : RAINBOW pattern COLORBAR pattern	

Procedure	Remarks
1. Apply a color bar pattern 2. Set up COLOR:24, TINT:00, B-Y-G:3-D, and R-Y-A:00. 3. Confirm nothing peculiar such as don´t output colors.	

Setting condition of various function	
DC. Transmission quantity	ON
White gray level correction	ON
Black gray level correction	ON
ABL bright	OFF
ABL contrast	ON
RGB gamma	ON
AI	ON

7.6. Color output Adjustment (HD)

Instrument name	Setting	Remarks
1. HD signal generator 2. Oscilloscope	Picture mode : NTSC 1080i Adjustment item : Sub Adjustment Picture menu : Dynamic Picture pattern : HD COLOR BAR pattern	

Procedure	Remarks
1. Apply a color bar pattern to use BSD ch or HD signal generator 2. Set up COLOR:22,TINT:00,B-Y-G:3G,and R-Y-A:00. 3. Confirm nothing peculiar such as don´t output colors.	

Setting condition of various function	
DC. Transmission quantity	ON
White gray level correction	ON
Black gray level correction	ON
ABL bright	OFF
ABL contrast	ON
RGB gamma	ON
AI	ON

7.7. Primary test

Procedure	Remarks
1. Connect AC Cord to an outlet and power switch is turned on. 2. Apply monoscope pattern and Focus the picture. 3. Perform rough purity Adjustment. 4. Perform rough convergence Adjustment. 5. Perform rough white balance Adjustment. 6. Connect an Antenna and confirm normal picture and sound.	

7.8. Encasement Aging

Setting	Remarks
1. SOUND LEVEL MIN. 2. COLOR CONTROL MAX. 3. TINT CONTROL CENTER. 4. BRIGHTNESS CONTROL MAX. 5. PICTURE CONTROL MAX. 6. SHARPNESS CONTROL MAX. 7. SPEAKER SW ON 8. AGING MODE ON	

Procedure	Remarks
1. Perform Aging at 132V AC for more than 60 minutes. **Note:** Aging has to be started after CUT-off Pre-Adjustment.	

Instrument name	Connection	Remarks
1. DC current meter	TPD1(+) - TPD2(-)	

Procedure	Remarks
1. Apply 132V AC. 2. Push the "RECALL" key on the remote transmitter, so that Aging mode comes out. 3. Apply a monoscope pattern. And confirm meter indicates 2400 ± 100uA. 4. If the meter is not above value, adjust Sub-BRIGHT data (BRIGH) and/or screen volume.	

7.9. Deflection circuit pre Adjustment

Instrument name	Connection	Remarks
1. High voltage meter 2. Adjustment computer 3. Remote transmitter	(+) CRT ANODE LEAD (-) CRT DAG GROUND CRT GND	50kV RANGE

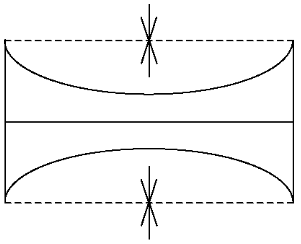
Procedure	Remarks
1. Set geomagnetic corr. Menu to "0"(CENTER). 2. Apply a monoscope pattern at 480i mode. 3. Adjust vertical size data to get round. 4. Obtain a crosshatch pattern. 5. Use adjustment computer to adjust Brightness and Contrast registers until picture is black. Memorize original data of Brightness and Contrast Verify high voltage reading on meter is 33 ± 1.0kV. 6. Obtain a monoscope pattern, and set above registers to original data. 7. Verify horizontal width is in normal Range. 8. Use adjustment computer to adjust E-W PCC(PCC) register. 9. Use adjustment computer to adjust H-WIDTH (H WID) register proper horizontal size. 10. Use adjustment computer to adjust H-CENTERING (H POS) register until picture is centered correctly. 11. Use adjustment computer to adjust KEYSTONE (TRAP) register properly. 12. Apply a 1080i signal. 13. Adjust vertical size data to get round. 14. Obtain a crosshatch pattern. 15. Use adjustment computer to adjust Brightness and Contrast registers until picture is black. Memorize original data of Brightness and Contrast. Verify high voltage reading on meter is 30.5 ± 1.0kV. 16. Repeat from 5 to 10 items at 1080i signal.	

7.10. Purity Adjustment

Instrument name	Setting	Remarks
1. Non-magnetic field room 2. Degaussing coil 3. 4. Microscope 5. RF signal generator 6. HD signal generator (Equivalent of SG-T)	· Fully degauss the TV by using an external degaussing coil · Rough adjustment of H-Position, V-Position, White balance, Focus and Convergence has been completed. · Perform aging for more than 60 minutes. · Beam current is 2400 ± $^{50}_{200}$ µA · Operate the TV for 60 minutes using the first Purity Check field to stabilize the CRT.	

Inspection method	Remarks

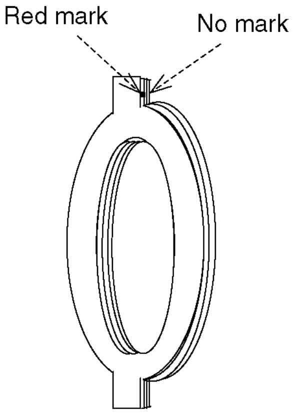
1. Fully degauss the CRT by using an external degaussing coil, and fully degauss the chassis.
2. Apply a monoscope pattern, and confirm meter indicate 2400 ± $^{50}_{200}$ µA.
3. Adjusts the CRT landing to the optimum in the DY back and forth position adjustment and Purity magnet
4. Apply a HDBB cross hatch pattern or a cross hatch pattern.
5. Adjusts a perpendicular position adjustment magnet so that the upper and lower pin cushion warp to become equal.

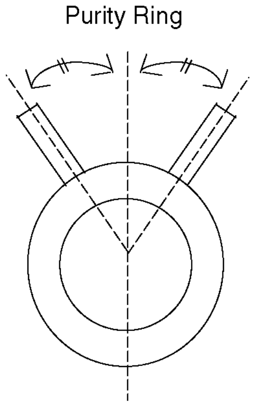


6. If purity error is found, repeat the adjustment step 3 to 5 until an optimum is obtained.
7. Tighten up DY once again 20-30 minutes later.

Note 1:

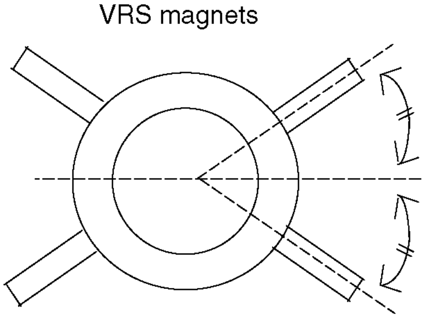
Inifialize purity ring, pairwise the red tab and the no mark tab, and turn are and together with both tabs, after confirm to anmove the pattern open the both tabs symmetrical from upside position.





Note 2:

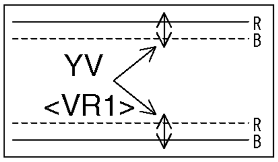
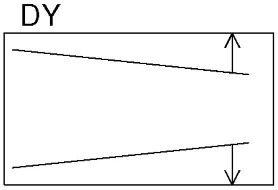
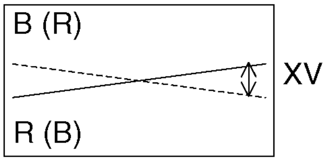
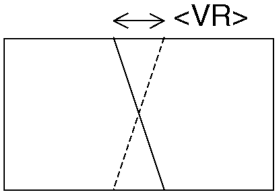
Inifialize penpendicular position adjustment magnet, pairwise the red tab and the no mark tab, and turn around together with both tabs, after confirm to unmove the pattern open the both tabs symmetrical from horizontal position.



7.11. Convergence adjustment and adjustment of DY (YHC/YV/XV)

Instrument name	Connection	Remarks
HD signal generator (Equivalent of SG~TG91E6) or RF signal generator		

Setting	Remarks
· V-POSITION and V-WIDTH are almost correct. · Set "VIDEO Adj." to "NORMAL". · Rough adjustment of Focus has been completed.	

Procedure	Remarks
1. Adjust convergence by 4-pole magnet and 6-pole magnet. 2. Make left and right side of DY Non-tilt. And adjust VR1. 3. Adjust YV at VR3. **Note:** Don't conduct second section, adjust third section at VR1, when doesn't have YV independent correction. 4. Adjust by differential coil XY and VR2 so that total convergence may become good. 5. If center convergence is poor, Repeat from item 1. 6. Fix CY by lacquer.    	Conduct second section only to have YV independent correction.

7.12. White quality adjustment

Setting	Remarks
1. Horizontal magnetic 0.30 Gauss 2. Vertical magnetic 0.45 Gauss 3. Geomagnetic correction DAC center 4. Perform aging for more than 60 minute **Note1:** Beam current is $2400 \pm {}^{50}_{200}$ uA	

Procedure	Remarks
1. After set up East-facing tube magnetic , adjust white quality at white pattern and confirm white quality at plane color (red, blue, green). 2. Set up West facing tube magnetic, adjust as same as first section. 3. Repeat to first and second section. 4. Fully degauss, confirm white quality at white pattern and plane color (red, blue, green). **Note 2:** · How to affix magnet. · Take magnet away from DY about 4 ~ 5cm. · When correction poor, magnet appose transversal or load Longitudinal. · When load longitudinal, gum up to apply an adhesive. **Note 3:** · When apply pre-pattern before white quality adjustment, after confirm at adjustment value return before purity adjustment, adjust white quality. 5. After set up South-facing tube magnetic, confirm pattern turn left-handed rotation at Geomagnetic correction DAC increase. 6. After set up North-facing tube magnetic, confirm pattern turn right-handed rotation at Geomagnetic correction DAC increase.	

7.13. Deflection Adjustment (480i/480p)

Instrument name	Connection	Remarks
1. Measurement computer or remote transmitter	SCL1,SDA1,FA2	
Setting		Remarks
1. BRIGHTNESS CONTROL CENTER (31DAC) 2. PICTURE CONTROL MAX.		
Procedure		Remarks
1. Apply a monoscope pattern. Change aspect to FULL mode. Adjust data of H-CENTERING (H POS) and H-WIDTH (H WID) Appropriately (left and right horizontal scale 2.5). Note: If horizontal linearity is poor, to adjust horizontal linearity data (H LIN) at crosshatch pattern . 2. After V-Position (V RAS) Adjustment, adjust V-size data (VEAMP) so that V-size is regular size shown in Fig.1 (Top and bottom vertical scale 1.9). 3. Apply a crosshatch pattern. Then adjust data of V-LIN (V-C) , V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC) , TOP SIDE CORNER PCC (TOPG), BOTTOM SIDE CORNER PCC (BTMG). PCC BALANCE (SIDE), PARALELLOGRAM (PARA) shown in Fig.2. 4. If upper side and lower side is unbalance, adjust data (PCCHG/PCCLG) so that PCC make good balance . 5. If top and bottom point is not good for corner PCC. Adjust data (TOPSL/BTMSL) of slice level. 6. Apply a monoscope pattern. Then confirm V-POSITION (V RAS), V-SIZE (VEAMP), H-POSITION (H POS), H-WIDTH (H WID). If they are poor, readjust them. 7. Apply monoscope pattern and crosshatch pattern. Then confirm that it is regular size show in Fig.1 and Fig.2. 8. Write adjustment data to EEPROM.		

Regular size : NTSC FULL

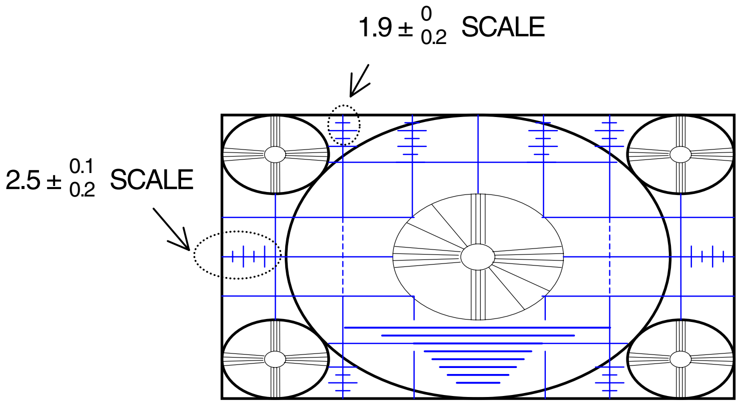
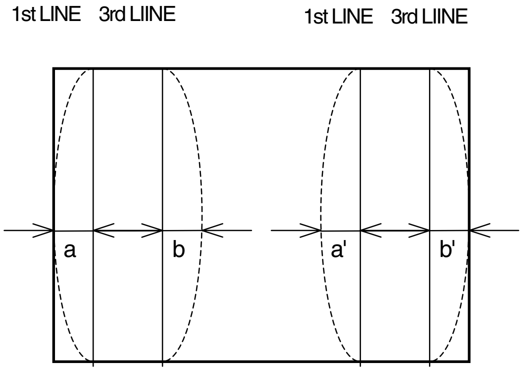

$1.9 \pm {}^{0}_{0.2}$ SCALE
$2.5 \pm {}^{0.1}_{0.2}$ SCALE

Fig. 1

PCC, PCC BALANCE


1st LINE
3rd LIINE
1st LINE
3rd LIINE
a
b
a'
b'

Adjust so that 1st line and 3rd line make good balance at monoscope pattern.

$a \simeq b \simeq a' \simeq b'$

Fig. 2

Note:
Adjust so that 2.0 SCALE line be cloud.

9. Apply monoscope pattern . Change aspect mode to JUST mode.
Then confirm to satisfy regular size shown in Fig. 3.

Regular size : NTSC JUST

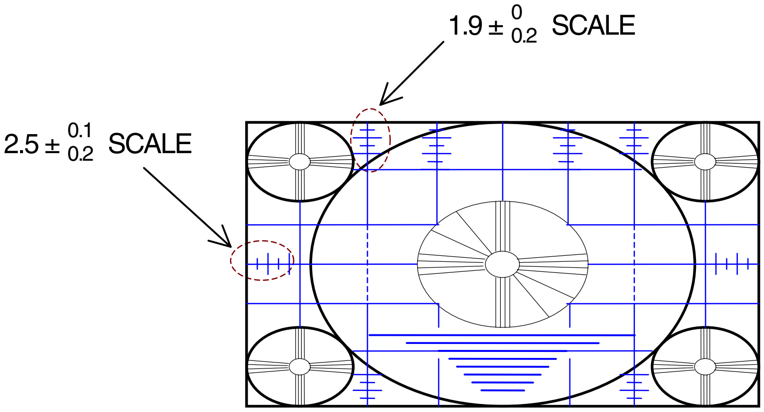

$1.9 \pm ^{0}_{0.2}$ SCALE
$2.5 \pm ^{0.1}_{0.2}$ SCALE

Fig. 3

10. Change aspect mode to 4 : 3 mode.
Then confirm to satisfy regular size shown in Fig. 4.

Regular size : NTSC 4 : 3

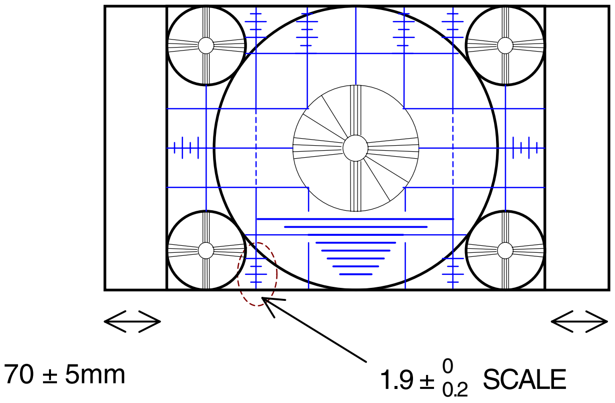

70 ± 5mm
$1.9 \pm ^{0}_{0.2}$ SCALE

Fig. 4

Note:
If any point is not good, Re-Adjust connection data.

11. Apply 480p monoscope pattern .
12. Confirm size and linearity of horizontal and vertical for each aspect mode.
    480p FULL : Fig. 1 and Fig. 2
    480p JUST : Fig. 3
    480p 4 : 3 : Fig. 4
13. Apply 480p monoscope pattern. Change aspect mode to ZOOM mode.
14. After V-Position (V RAS) adjustment, adjust V-size data (VEAMP) so that V-size is regular size shown in Fig. 5
15. Apply a crosshatch pattern. Then adjust data of V-LIN (V-C),
    V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC) ,
    TOP SIDE CORNER PCC(TOPG) ,BOTTOM SIDE CORNER PCC(BTMG) ,
    PCC BALANCE (SIDE), PARALELLOGRAM (PARA) shown in Fig. 6.
16. If upper side and lower side is unbalance, adjust data (PCCHG/PCCLG) so that PCC make good balance.
17. If top and bottom point is not good for corner PCC.
    Adjust data (TOPSL/BTMSL) of slice level.
18. Apply a monoscope pattern. Then confirm V-POSITION (V RAS) ,
    V-SIZE (VEAMP), H-POSITION (H POS), H-WIDTH (H WID).
    If they are poor, readjust them.
19. Apply monoscope pattern and crosshatch pattern.
    Then confirm that it is regular size show in Fig. 5 and Fig. 6.
20. Write adjustment data to EEPROM.
21. Confirm similarly about 480i signal for ZOOM mode.

Note:
If any point is not good,
Re-adjust connection data.

Regular size : NTSC ZOOM

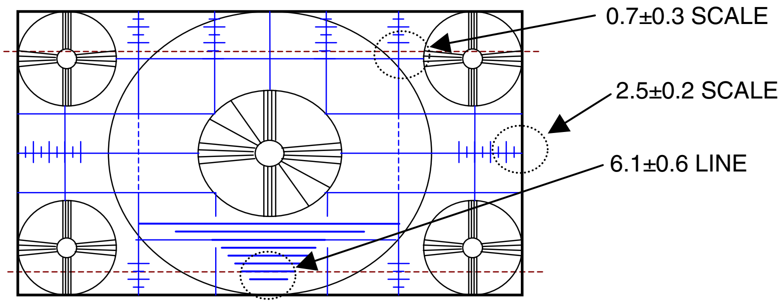

0.7±0.3 SCALE
2.5±0.2 SCALE
6.1±0.6 LINE

Fig. 5

Chip off top small circle is equal to it of bottom circle.

PCC, PCC BALANCE

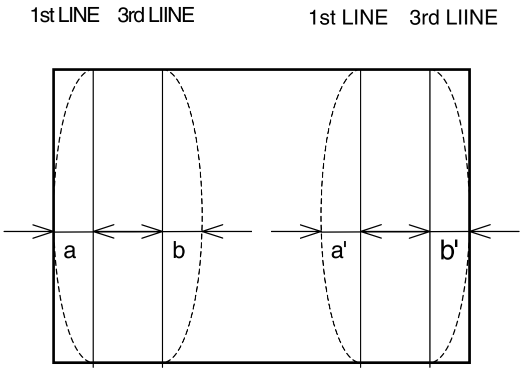
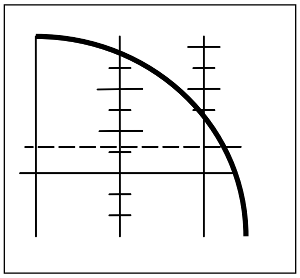

1st LINE
3rd LIINE
1st LINE
3rd LIINE
a
b
a'
b'

Fig. 6

Adjust so that 1st line and 3rd line make good balance at monoscope pattern.

$a \simeq b \simeq a' \simeq b'$

Expansion



7.14. Deflection Adjustment (1080i)

Instrument name	Connection	Remarks
1. Measurement computer or remote transmitter 2. Signal generator (1080i 16:9 signal)	SCL1, SDA1, FA2	

Setting	Remarks
1. BRIGHTNESS CONTROL CENTER(31DAC) 2. PICTURE CONTROL MAX.	

Procedure	Remarks

1. Apply a 1080i monoscope pattern to component input.

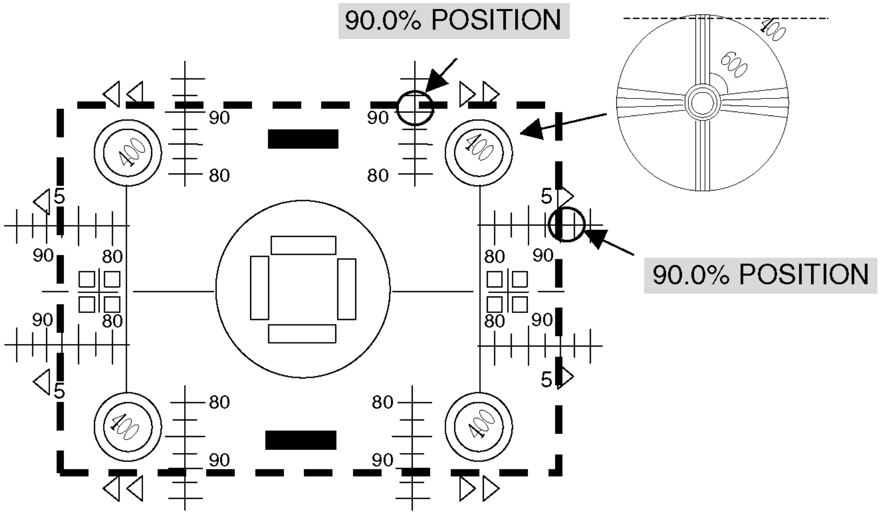
   Then adjust data of V-SIZE(VEAMP), V-POSITION(V RAS),

   H-WIDTH(H WID), H-POSITION(H POS) SO THAT V-SIZE, V-POSITION,

   H-WIDTH, H-POSITION satisfies regular shown in Fig.1.
2. Apply a 1080i crosshatch pattern. Then adjust data of V-LIN (V-C), V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC), TOP SIDE CORNER PCC (TOPG), BOTTOM SIDE CORNER PCC (BTMG), PCC BALANCE (SIDE), PARALELLOGRAM (PARA) and (PCCHG/PCCLG/TOPSL/BTMSL).

   (see 7.8 Defelection Adjustment(480i/480p) item 3.)
3. Apply a 1080i monoscope pattern and crosshatch pattern. Then confirm that it is regular size show in Fig.1.
4. Write adjustment data to EEPROM.

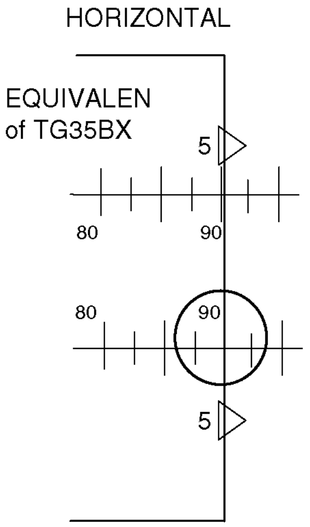
Regular size



90.0% POSITION
400
600
90
90
80
80
5
5
90
80
80
90
90
80
80
90
5
5
400
400
400
400
80
80
90
90
90.0% POSITION

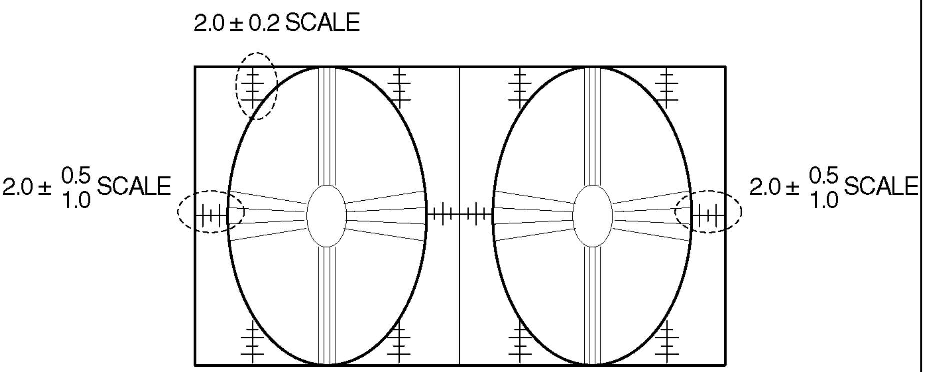
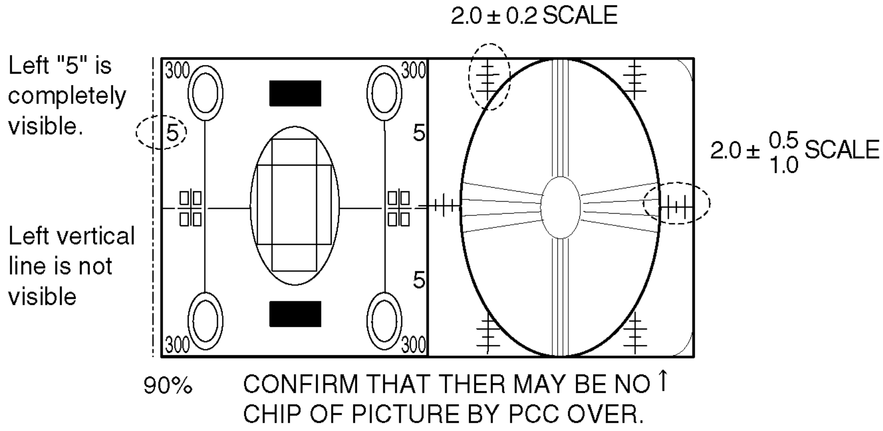
Adjust so that H-width is 90% scan. And adjust so that 90% line match edge of screen.

Adjust so that V-size is 90.0% scan. The area over 90.0% at screen top is poor for V-LIN and takes notice that this area is disappeared.

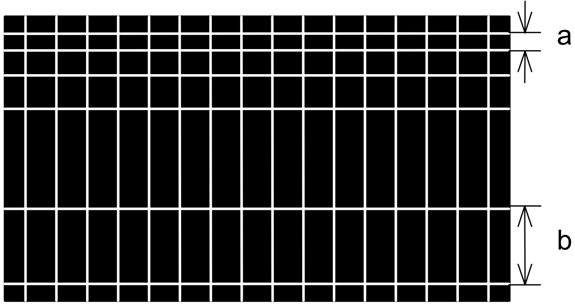
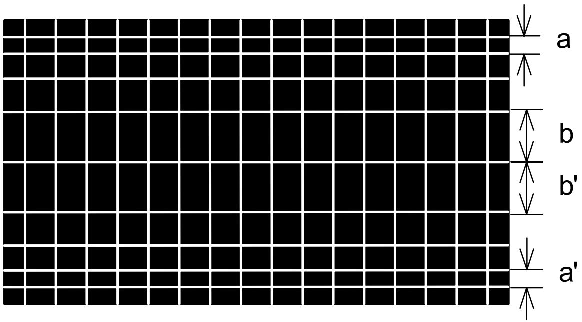


HORIZONTAL
EQUIVALEN
of TG35BX
5
80
90
80
90
5

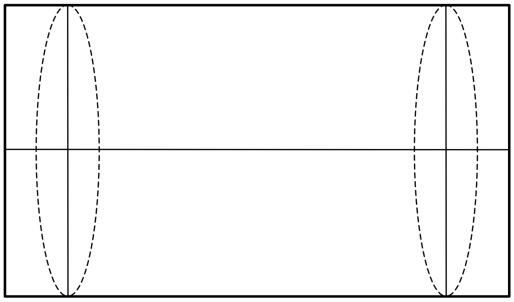
7.15. Deflection Adjustment (DOUBLE WINDOW)

Procedure	Remarks
1. Apply a monoscope pattern of NTSC to both parent picture and child picture. 2. Confirm that it is regular size show in Fig.1.  2.0 ± 0.2 SCALE 2.0 ± 0.5 1.0 SCALE 2.0 ± 0.5 1.0 SCALE Fig. 1 3. Apply a 1080i monoscope pattern to parent picture and a NTSC child pictures. 4. Confirm that it is regular size show in Fig.2.  2.0 ± 0.2 SCALE Left "5" is completely visible. Left vertical line is not visible 300 300 300 300 5 5 5 2.0 ± 0.5 1.0 SCALE 90% CONFIRM THAT THER MAY BE NO ↑ CHIP OF PICTURE BY PCC OVER. Fig. 2	

7.16. Deflection Adjustment Procedure

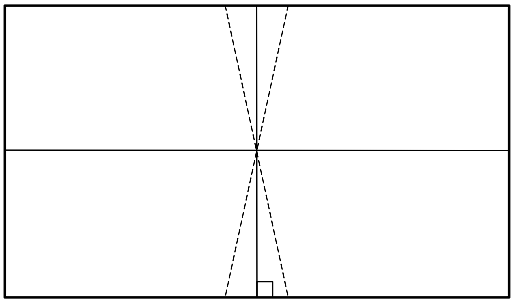
Procedure	Remarks
<V-LINIARITY (V-C)>  Adjust so that horizontal lines may be equally spaced (a=b). <V-S CORRECTION (V-S)>  Adjust so that horizontal lines may be equally spaced (a=b, a’=b’).	

<PCC BALANCE (SIDE)>



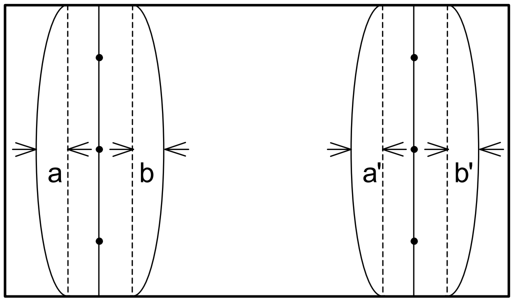
Adjust data of PCC balance (side) so that PCC of left and right side 2nd vertical lines are good balance.
In this case, be careful that center vertical line does not become bow remarkably.

<PARALELLOGRAM (PARA)>



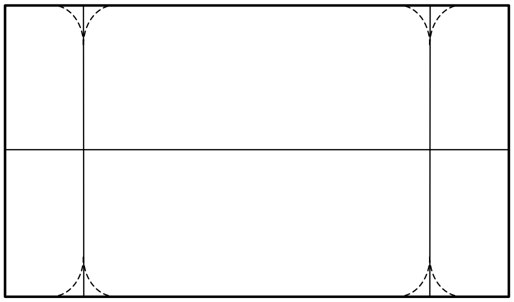
Adjust so that center vertical line is vertical.
Note that if left and right side vertical lines have paralellogaram ,
Adjust data of paralellogram so that left,right and center vertical line may become good balance.

<PCC (PCC)>

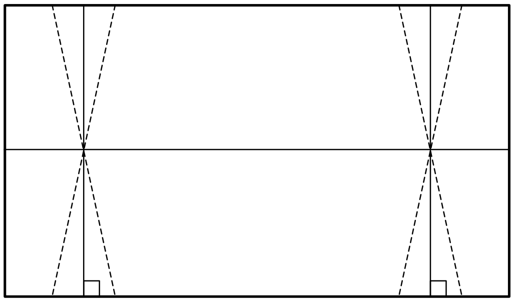


Adjust PCC data so that line on both side of vertical dot line become good balance (a=b=a'=b').
At NORMAL, JUST, and ZOOM mode, adjust with outside line of vertical dot line.

<TOP/BOTTOM SIDE CORNER PCC (TOPG/BTMG)>



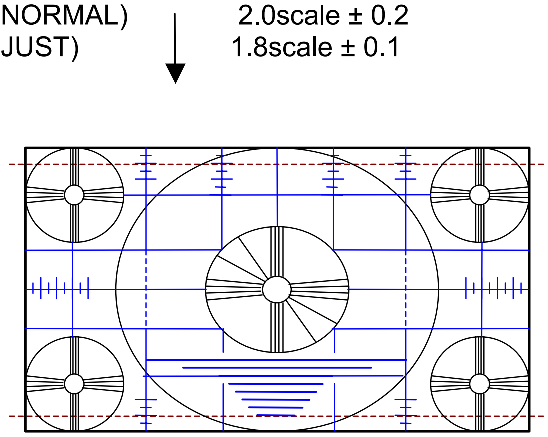
<TRAPIZOID(TARP)>



Adjust data of TRAPIZOID (TRAP) so that both side vertical lines become vertical.

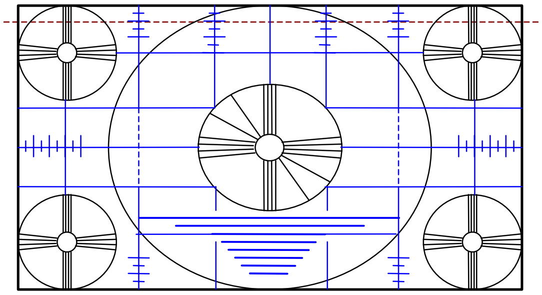
<V-HEIGHT (V-HET)>

(FULL) Right/Left 2.0scale ± 0.2
(NORMAL) 2.0scale ± 0.2
(JUST) 1.8scale ± 0.1

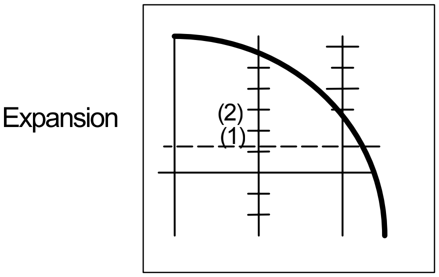


<V-HEIGHT ZOOM mode>

(upper) 0.7scale ± 0.3
(lower) 6.1line ± 0.6

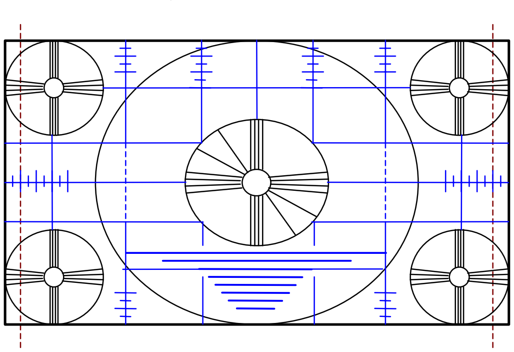


Chip off top small circle is equal to it of bottom circle.



<H-WIDTH (H-WID)>

(FULL) Right/Left 2.5 scale $\pm^{0.1}_{0.2}$
(ZOOM) 2.5scale ± 0.2
(JUST) 2.8scale $\pm^{0.1}_{0.2}$



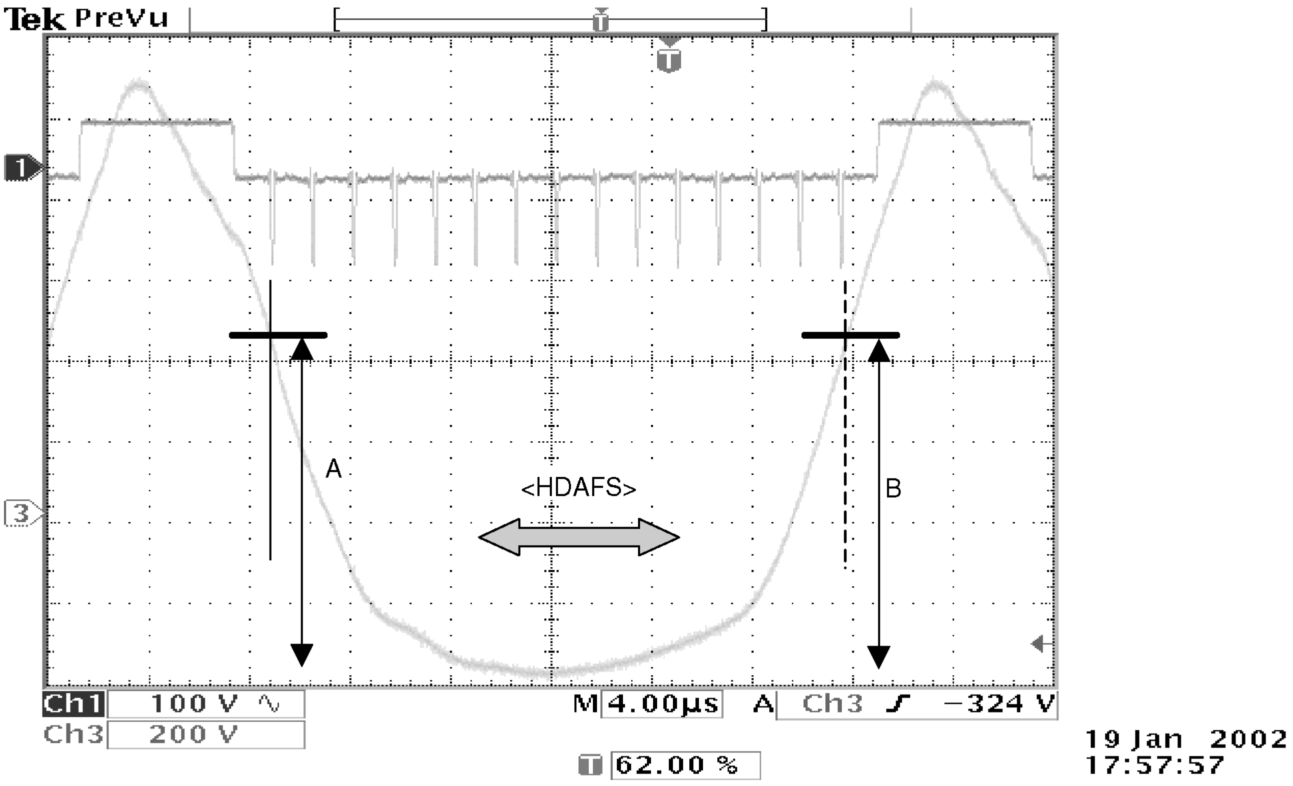
Note: Don’t chip off ON SCREE at JUST MODE.

7.17. DAF Adjustment

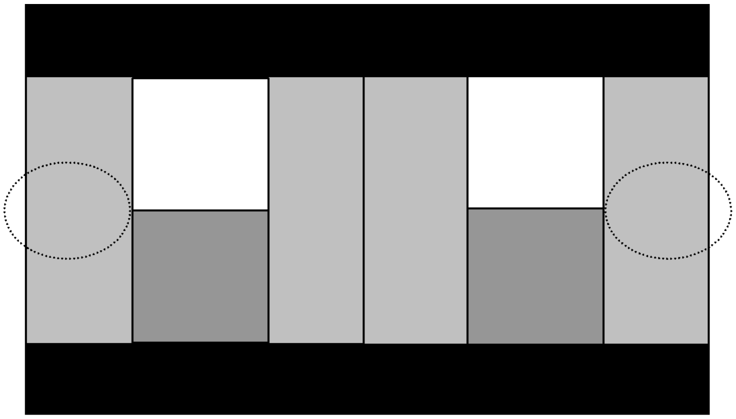
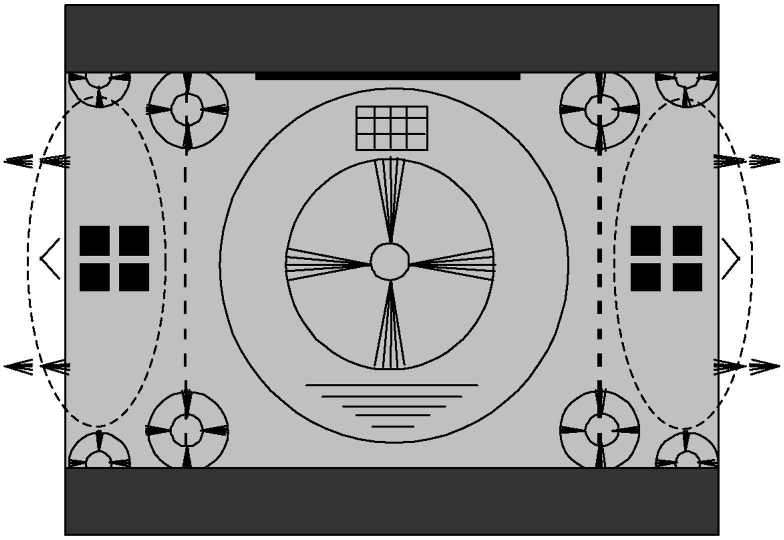
Instrument name	Connection	Remarks
1. Oscilloscope with 100x1 probe	DAF OUT (J172) - GND KG - GND	
10X1 probe	DAF OUT (J172) - GND KG - GND	

Setting		Remarks
BRIGHTNESS CONTROL	CENTER (31DAC)	
PICTURE CONTROL	MAX.	

Procedure	Remarks
1. Apply a cross hatch pattern (NTSC). 2. Connect oscilloscope DAF out (DAF WAVE FORM) and KG (SIGNAL WAVE) . If the level of "A" and the level of "B" are different, Adjust data "H DAF phase" (HDAFS) so that became the same level. (Fig.1) 3. Apply a crosshatch pattern (DTV 1080i). 4. Same as (NTSC) If the level of "A" and the level of "B" are different, adjust data "H DAF phase" (HDAFS) so that became the same level. (Fig.1) 5. Apply a crosshatch pattern (525p). If the level of "A" and the level of "B" are different, adjust data"H DAF phase" (HDAFS) so that became the same level. (Fig.1) 6. Confirm that Focus balance of left side and light side. is same level. both NTSC signal and 1080i signal.	

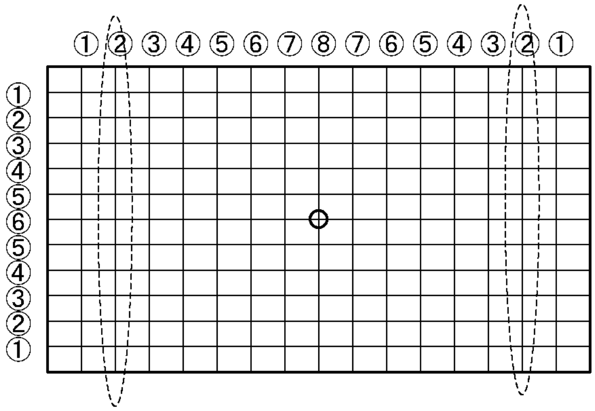
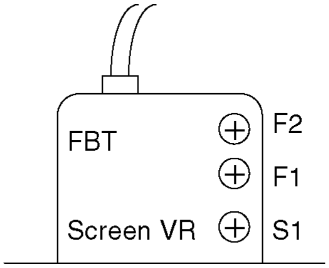


7.18. DAF Adjustment (Moire check)

Procedure	Remarks
1. Apply a white balance pattern at split picture mode (NTSC). 2. Confirm no moire on the both side of display.  3. Apply a ITE monoscope pattern (DTV 1080i) Y=40% signal level 4. Confirm no moire on the both side of display. 	

7.19. Focus Adjustment

Instrument name	Connection	Remarks
1. HD signal generator 2. RF signal generator	Apply HDBB Crosshatch pattern Crosshatch pattern	

Inspection method	Remarks
1. Apply a crosshatch pattern. 2. Adjust the FOCUS VOLUME1 so that the vertical lines two lines from the edge is minimizes. 3. Turn the FOCUS VOLUME2 fully counterclockwise, and adjust the FOCUS VOLUME2 so that the center of picture is the sharpest. **Note:** The focus is balanced for the centerline (vertical) of the crosshatch pattern and the vertical lines two lines from the edge. Achieve a balance center point focus and out must circumferential focus. Repeat the adjustments 2 and 3 Until an optimum is obtained. Apply a HD crosshatch pattern and confirm the focus. If they are poor, repeut adjustment DAF phase data.  Fig. 1  4. Apply a 1080i-crosshatch pattern and confirm the focus.	

Instrument name	Connection	Remarks
1. HD signal generator		

Inspection method	Remarks

1. Apply a crosshatch pattern Fig. 1.
2. Adjust the FOCUS VOLUME1 so that the thickness of vertical lines one line from the edge minimizes, and two white lines can be seen.
3. Turn the FOCUS VOLUME2 fully counterclockwise, and adjust the FOCUS VOLUME2 so that the center of picture is the sharpest, and two white lines can be seen.

Note:

The focus is balanced for the centerline (vertical) of the crosshatch pattern and the vertical lines two lines from the edge.

Achieve a balance center point focus and out must circumferential focus.

Repeat the adjustments 2 and 4 until an optimum is obtained.

Apply a HD crosshatch pattern and confirm the focus.

If they are poor, repeat adjustment DAF phase data.

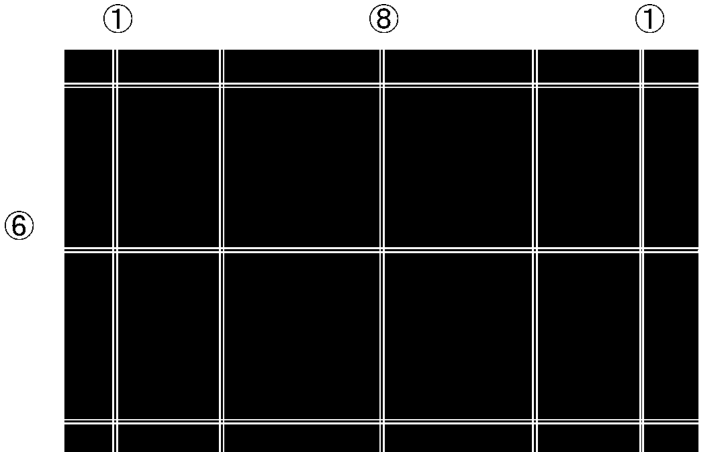
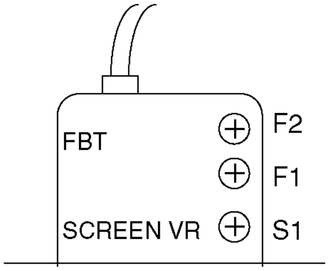


Fig. 1



4. Apply a 1080i-crosshatch pattern and confirm the focus.

7.20. High Voltage and High Voltage protector HHS Adjustment

Instrument name	Connection	Remarks
1. RF signal generator 2. Resistance high Voltage meter 3. DC current meter 4. Digital Volt meter	D13 ① (TPD1) D13 ② (TPD2) D13 ④ D13 ③ (GND)	

Procedure	Remarks

1. Turn power on, apply a moonscape pattern.
2. Confirm meter indicate $2300 \pm {}^{50}_{200}$ uA.
3. Adjust to turn high voltage variable resistor volume VR524 so that High Voltage meter indicate 30.5 ± 0.3kV.
4. Adjust to turn HHS variable resister volume so that Digital Volt meter indicate 2.25 ± 0.05V.
5. Apply a black pattern.
6. Turn VR524, confirm to move High Voltage Protector and to work SOS under 38.5kV and High Voltage value.
7. Turn back VR524, turn power on and apply a moonscape pattern.
8. Adjust to turn VR524 so that High Voltage meter indicate 30.5 ± 0.3kV.
9. After adjustment, gum up to apply an adhesive for VR524,VR528.

7.21. White balance Adjustment (NTSC/HD)

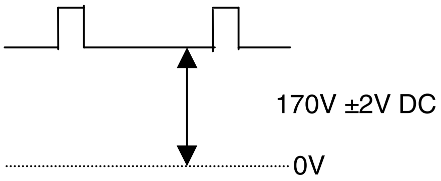
Instrument name	Connection	Remarks
1. White balance meter 2. Measurement computer 3. Oscilloscope	Surface of CRT SCL1,SDA1,FA2 KG-GND	Band width : More than 5MHz

Setting		Remarks
1. Screen VR.	Fully counter clockwise	
2. Cut off & Drive data	“CUT R” = 0-00 “CUT G” = 1-80 “CUT B” = 0-00 “R DR” = 80 “B DR” = 80 “BRI” = 1-D0	
3. PIC MODE	VIVID (NORMALIZED)	
4. White balance SW	COOL	

Procedure | **Remarks**

1. Apply a white balance pattern.
2. Push “RECALL” key when “CUT-G” is selected.
3. Observe GK oscilloscope, Then adjust “CUT G” data so that scanning period get 170V ± 2V DC. Remove the probe of oscilloscope.

GK WAVEFORM



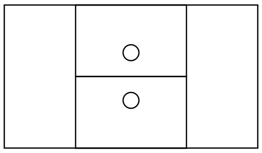
4. Turn Screen VR. to clockwise slowly and set its point where first color is slightly appeared.
5. Then make above line to white by changing the data for “CUT R” and “CUT B”.
6. Push “RECALL” key to turn Service SW off.

Low right Adjustment

7. SET COLOR TEMP to COOL.
8. Place the light reception food of the White balance meter on each position shown in Fig. 1.
   Adjust data of “BRT” and “CONT” so that luminance of Low (Black) parts and High (White) parts in picture patter may become following value (Memory data of “CONT”).
   Note: because Adjustment of Low parts and High parts affect each other, Repeat Adjustment

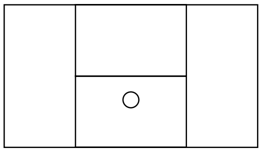
	ADJUSTMENT SPEC	DATA
LOW (BLACK) PARTS	5.0 ± 0.6 [cd/m^2]	BRT
HIGH (WHITE) PARTS	160 ± 8.0 [cd/m^2]	CONT

(FIG. 1)
Food position of White balance meter



9. Place the light reception food of the white balance meter on center of Low (Black) parts in picture pattern. (See Fig. 2)
10. Adjust data of "CUT R" and "CUT B" so that white balance meter may indicate following value. If luminance is different from following value, Readjust data of "BRT".

(FIG. 2)
Food position of white balance meter



*Set the food of White balance meter to position that Color SAG is nothing.

[NTSC LOW LIGHT]

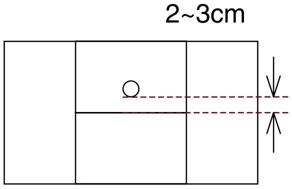
	ADJUSTMENT SPEC	DATA
	CT-34WX53	
COLOR TEMP. [K]	12800 ± 200	CUT R
DEVIATION [ΔuV]	0.004 ± 0.002	CUT B
LUMINACE [cd/m^2]	5.0 ± 0.6	BRT

HIGH LIGHT ADJUSTMENT

11. Place the light reception food of the White balance meter on position that the food bottom edge is 2~3cm UP from V-center of High (White) parts in picture pattern. (See Fig. 3)

12. Adjust data of "R DR" and "B DR" so that White balance meter may indicate following value. If luminance is different from following value, Readjust data of "CONT".

(Fig. 3)
Food position of White balance meter



[NTSC HIGH LIGHT]

	ADJUSTMENT SPEC	DATA
	CT-34WX53	
COLOR TEMP. [K]	12400 ± 200	R DR
DEVIATION [ΔuV]	-0.002 ± 0.002	B DR
LUMINACE [cd/m^2]	160.0 ± 8.0	CONT

13. Confirm the White balances of Low light.
    If it is poor, Repeat item 12 to item 16.
14. If you change data of "CONT", Return former data.

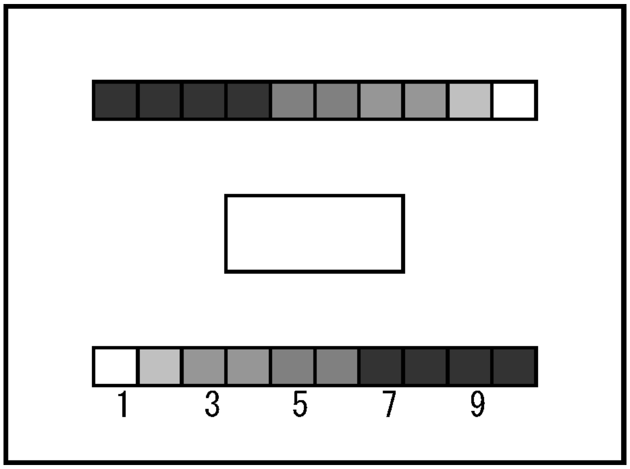
HD WHITE BALANCE

15. Set COLOR TEMP to COOL.
16. Apply HD White balance pattern.
17. Confirm that HD White balance is as same as NTSC .
18. If adjust level is no good, re-adjust white balance for HD.

7.22. Sub-Bright Adjustment (NTSC)

Instrument name	Connection	Remarks
1. Measurement computer	SCL1, SDA1, FA2	

Setting	Remarks
1. PICTURE SETTEINGS VIVID (NORMAL) 2. NATURAL COLOR OFF 3. COLOR TEMP COOL 4. BRIGHT (NTSC) 9-90 BRIGHT (HD) 9-B0	

Procedure	Remarks
<Condition> · The adjustment of Sub-Contrast, Sub-Color, and White balance complete. · Do this adjustment in the dark room 1. Apply a window pattern. 2. After select "BRIGHT", press R-TUNE botten, Adjust SCREEN-VR so that the 3rd paragraph shines faintly and 4th paragraph does to the sinking style. (See Fig. 1)  Fig. 1	480i BRIGHT DAC Can adjust as same as SUB-BRIGHT. **Note:** HD SUB-BRIGHT is adjusted automatically.

7.23. Heater Voltage Confirmation

Instrument name	Setting	Remarks
1. RF signal generator 2. HD signal generator 3. Resistance high Voltage meter 4. DC current meter 5. Digital Volt meter	D13 ① (+),D13 ② (-) CRT Heater terminal	

Procedure	Remarks
1. Apply a moonscape pattern. 2. Adjust SUB-CONTRAST or SUB-BRIGHT so that DC current meter 2300 ± $^{50}_{200}$ uA. 3. Confirm that Digital Volt meter should be at 6.0V ± 0.24V. 4. Confirm that the High Volt meter should be at 30.5kV ± 0.3V. 5. Apply a BS101 HD moonscape pattern confirm that the High Volt meter should be at 30.5kV ± 0.3kV.	

Instrument name	Connection	Remarks
1. Measurement computer or remote transmitter	SCL1,SDA1,FA2	

Setting		Remarks
1. BRIGHTNESS CONTROL	CENTER (31DAC)	
2. PICTURE CONTROL	MAX.	

Procedure	Remarks
1. Apply a monoscope pattern. Change aspect to FULL mode. Adjust data of H-CENTERING (H POS) and H-WIDTH (H WID) Appropriately (left and right horizontal scale 2.5). Note: If horizontal linearity is poor, to adjust horizontal linearity data (H LIN) at crosshatch pattern . 2. After V-Position (V RAS) Adjustment, adjust V-size data (VEAMP) so that V-size is regular size shown in Fig.1 (Top and bottom vertical scale 1.9). 3. Apply a crosshatch pattern. Then adjust data of V-LIN (V-C) , V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC) , TOP SIDE CORNER PCC (TOPG), BOTTOM SIDE CORNER PCC (BTMG). PCC BALANCE (SIDE), PARALELLOGRAM (PARA) shown in Fig.2. 4. If upper side and lower side is unbalance, adjust data (PCCHG/PCCLG) so that PCC make good balance . 5. If top and bottom point is not good for corner PCC. Adjust data (TOPSL/BTMSL) of slice level. 6. Apply a monoscope pattern. Then confirm V-POSITION (V RAS), V-SIZE (VEAMP), H-POSITION (H POS), H-WIDTH (H WID). If they are poor, readjust them. 7. Apply monoscope pattern and crosshatch pattern. Then confirm that it is regular size show in Fig.1 and Fig.2. 8. Write adjustment data to EEPROM.	

Regular size : NTSC FULL

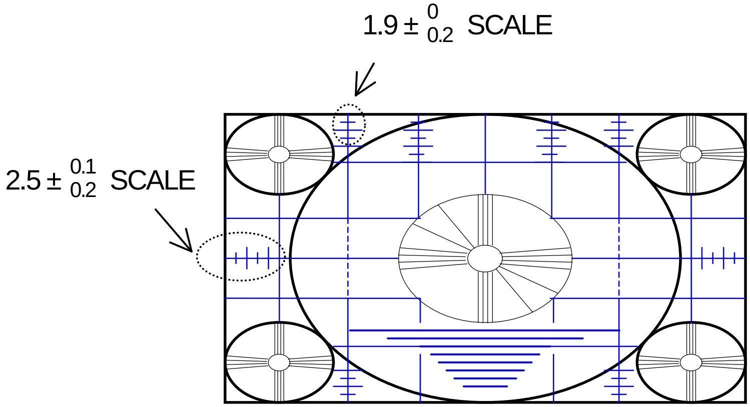
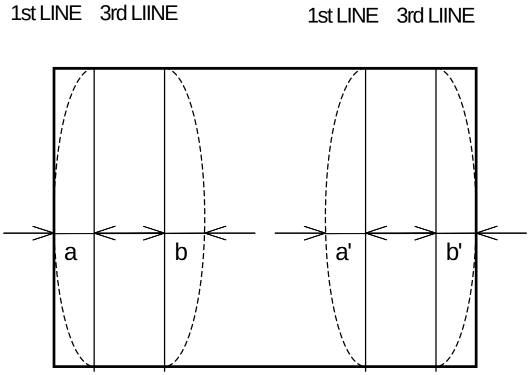

$1.9 \pm^{0}_{0.2}$ SCALE
$2.5 \pm^{0.1}_{0.2}$ SCALE

Fig. 1

PCC, PCC BALANCE


1st LINE
3rd LIINE
1st LINE
3rd LIINE
a
b
a'
b'

Adjust so that 1st line and 3rd line make good balance at monoscope pattern.

$a \simeq b \simeq a' \simeq b'$

Fig. 2

Note:
Adjust so that 2.0 SCALE line be cloud.

9. Apply monoscope pattern . Change aspect mode to JUST mode.
Then confirm to satisfy regular size shown in Fig. 3.

Regular size : NTSC JUST

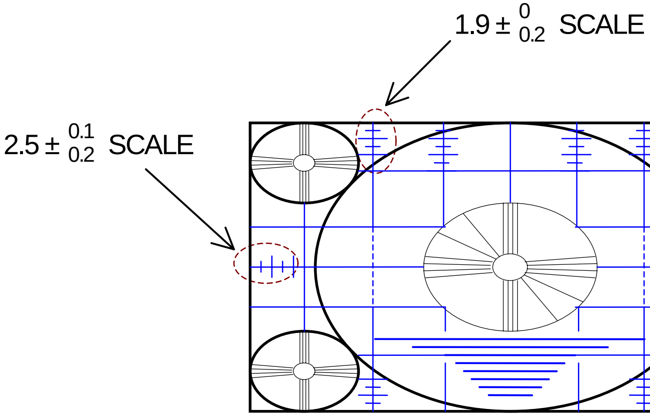

$1.9 \pm^{0}_{0.2}$ SCALE
$2.5 \pm^{0.1}_{0.2}$ SCALE

Fig. 3

10. Change aspect mode to 4 : 3 mode.
Then confirm to satisfy regular size shown in Fig. 4.

Regular size : NTSC 4 : 3

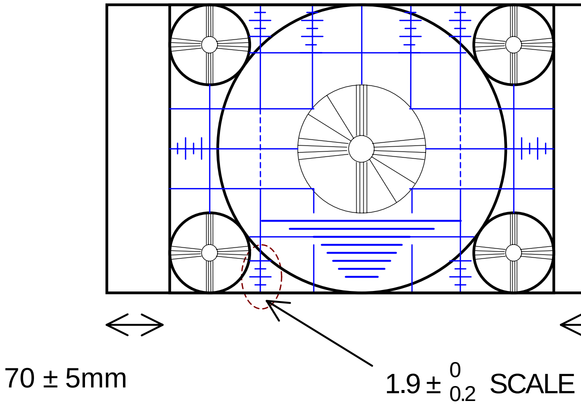

70 ± 5mm
$1.9 \pm^{0}_{0.2}$ SCALE

Fig. 4

Note:
If any point is not good, Re-Adjust connection data.

11. Apply 480p monoscope pattern .
12. Confirm size and linearity of horizontal and vertical for each aspect mode.
    480p FULL : Fig. 1 and Fig. 2
    480p JUST : Fig. 3
    480p 4 : 3 : Fig. 4
13. Apply 480p monoscope pattern. Change aspect mode to ZOOM mode.
14. After V-Position (V RAS) adjustment, adjust V-size data (VEAMP) so that V-size is regular size shown in Fig. 5
15. Apply a crosshatch pattern. Then adjust data of V-LIN (V-C),
    V-S CORRECTION (V-S), TRAPIZOID (TRAP), PCC (PCC) ,
    TOP SIDE CORNER PCC(TOPG) ,BOTTOM SIDE CORNER PCC(BTMG) ,
    PCC BALANCE (SIDE), PARALELLOGRAM (PARA) shown in Fig. 6.
16. If upper side and lower side is unbalance, adjust data (PCCHG/PCCLG) so that PCC make good balance.
17. If top and bottom point is not good for corner PCC.
    Adjust data (TOPSL/BTMSL) of slice level.
18. Apply a monoscope pattern. Then confirm V-POSITION (V RAS) ,
    V-SIZE (VEAMP), H-POSITION (H POS), H-WIDTH (H WID).
    If they are poor, readjust them.
19. Apply monoscope pattern and crosshatch pattern.
    Then confirm that it is regular size show in Fig. 5 and Fig. 6.
20. Write adjustment data to EEPROM.
21. Confirm similarly about 480i signal for ZOOM mode.

Note:
If any point is not good,
Re-adjust connection data.

Regular size : NTSC ZOOM

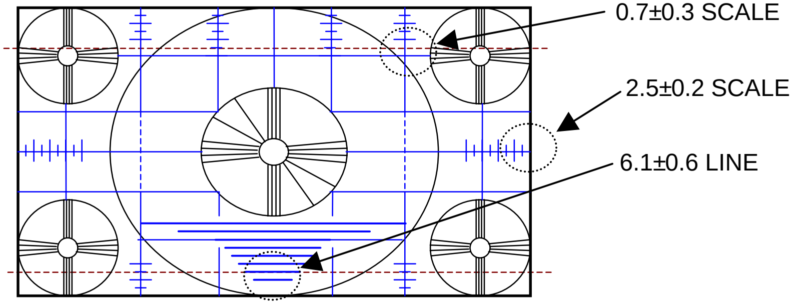

0.7±0.3 SCALE
2.5±0.2 SCALE
6.1±0.6 LINE

Fig. 5

Chip off top small circle is equal to it of bottom circle.

PCC, PCC BALANCE

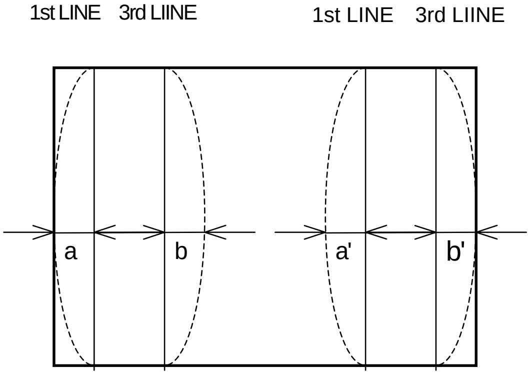
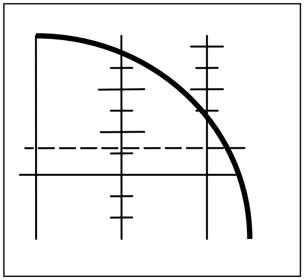

1st LINE
3rd LIINE
1st LINE
3rd LIINE
a
b
a'
b'

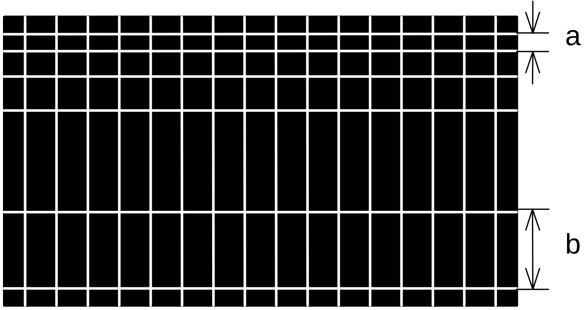
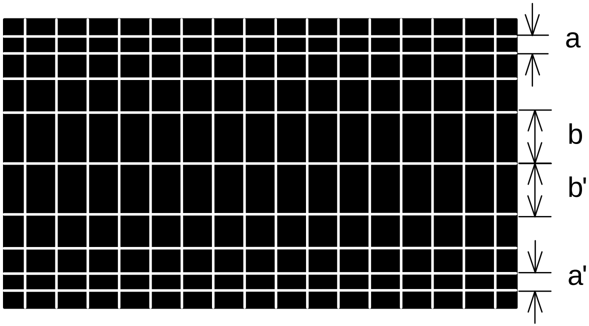
Fig. 6

Adjust so that 1st line and 3rd line make good balance at monoscope pattern.

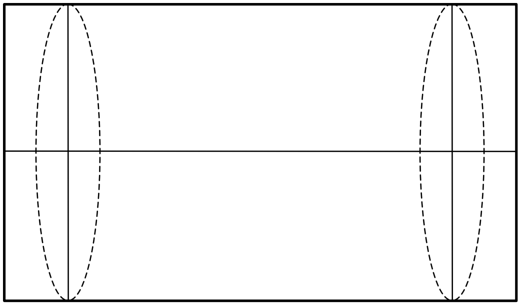
$a \simeq b \simeq a' \simeq b'$

Expansion



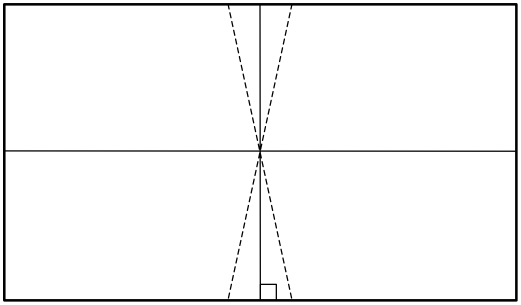
Procedure	Remarks
<V-LINIARITY (V-C)>  Adjust so that horizontal lines may be equally spaced (a=b). <V-S CORRECTION (V-S)>  Adjust so that horizontal lines may be equally spaced (a=b, a’=b’).	

<PCC BALANCE (SIDE)>



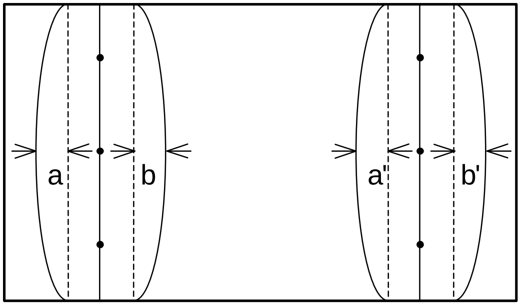
Adjust data of PCC balance (side) so that PCC of left and right side 2nd vertical lines are good balance.
In this case, be careful that center vertical line does not become bow remarkably.

<PARALELLOGRAM (PARA)>



Adjust so that center vertical line is vertical.
Note that if left and right side vertical lines have paralellogaram ,
Adjust data of paralellogram so that left,right and center vertical line may become good balance.

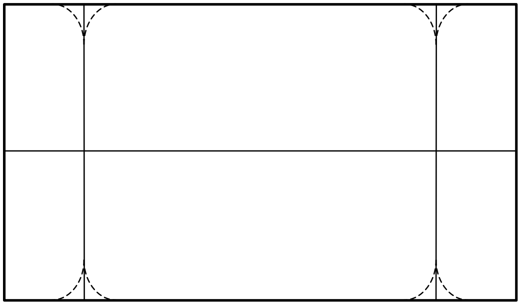
<PCC (PCC)>



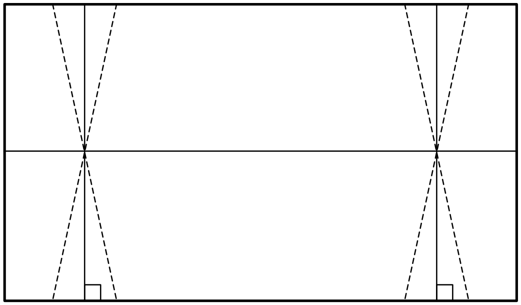
Adjust PCC data so that line on both side of vertical dot line become good balance (a=b=a'=b').

At NORMAL, JUST, and ZOOM mode, adjust with outside line of vertical dot line.

<TOP/BOTTOM SIDE CORNER PCC (TOPG/BTMG)>



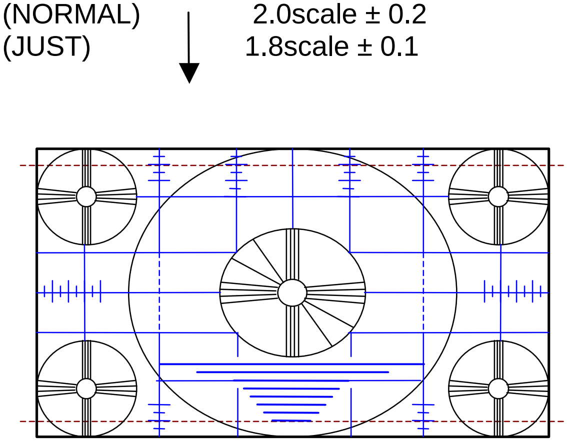
<TRAPIZOID(TARP)>



Adjust data of TRAPIZOID (TRAP) so that both side vertical lines become vertical.

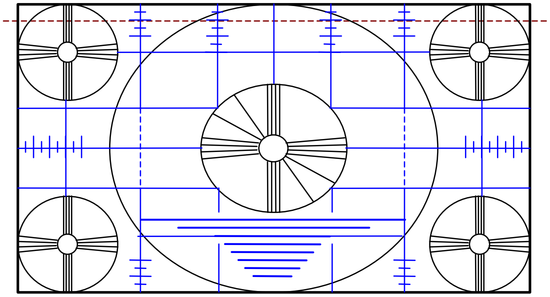
<V-HEIGHT (V-HET)>

(FULL) Right/Left 2.0scale ± 0.2
(NORMAL) 2.0scale ± 0.2
(JUST) 1.8scale ± 0.1

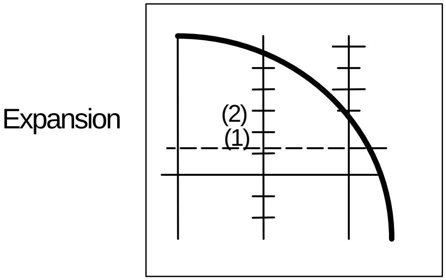


<V-HEIGHT ZOOM mode>

(upper) 0.7scale ± 0.3
(lower) 6.1line ± 0.6

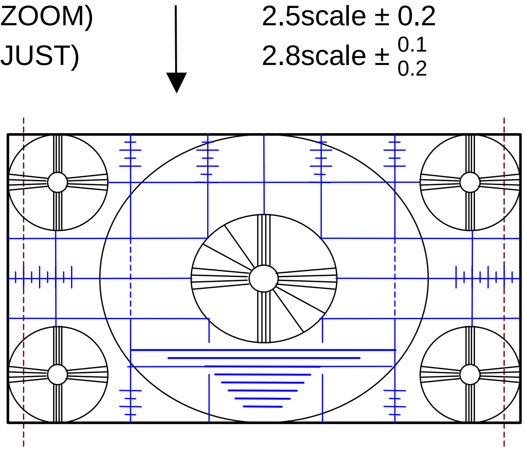


Chip off top small circle is equal to it of bottom circle.



<H-WIDTH (H-WID)>

(FULL) Right/Left 2.5 scale $\pm\begin{smallmatrix}0.1\\0.2\end{smallmatrix}$
(ZOOM) 2.5scale ± 0.2
(JUST) 2.8scale $\pm\begin{smallmatrix}0.1\\0.2\end{smallmatrix}$



Note: Don’t chip off ON SCREE at JUST MODE.

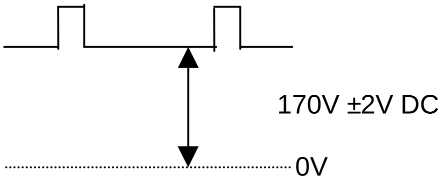
Instrument name	Connection	Remarks
1. White balance meter 2. Measurement computer 3. Oscilloscope	Surface of CRT SCL1,SDA1,FA2 KG-GND	Band width : More than 5MHz

Setting		Remarks
1. Screen VR.	Fully counter clockwise	
2. Cut off & Drive data	“CUT R” = 0-00 “CUT G” = 1-80 “CUT B” = 0-00 “R DR” = 80 “B DR” = 80 “BRI” = 1-D0	
3. PIC MODE	VIVID (NORMALIZED)	
4. White balance SW	COOL	

Procedure

1. Apply a white balance pattern.
2. Push “RECALL” key when “CUT-G” is selected.
3. Observe GK oscilloscope, Then adjust “CUT G” data so that scanning period get 170V ± 2V DC. Remove the probe of oscilloscope.

GK WAVEFORM



4. Turn Screen VR. to clockwise slowly and set its point where first color is slightly appeared.
5. Then make above line to white by changing the data for “CUT R” and “CUT B”.
6. Push “RECALL” key to turn Service SW off.

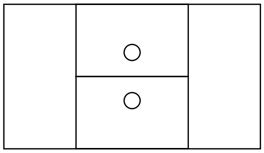
Low right Adjustment

7. SET COLOR TEMP to COOL.
8. Place the light reception food of the White balance meter on each position shown in Fig. 1.
   Adjust data of “BRT” and “CONT” so that luminance of Low (Black) parts and High (White) parts in picture patter may become following value (Memory data of “CONT”).
   Note: because Adjustment of Low parts and High parts affect each other, Repeat Adjustment

	ADJUSTMENT SPEC	DATA
LOW (BLACK) PARTS	5.0 ± 0.6 [cd/m^2]	BRT
HIGH (WHITE) PARTS	160 ± 8.0 [cd/m^2]	CONT

Remarks

(FIG. 1)
Food position of White balance meter



9. Place the light reception food of the white balance meter on center of Low (Black) parts in picture pattern. (See Fig. 2)
10. Adjust data of "CUT R" and "CUT B" so that white balance meter may indicate following value. If luminance is different from following value, Readjust data of "BRT".

[NTSC LOW LIGHT]

	ADJUSTMENT SPEC	DATA
	CT-34WX53	
COLOR TEMP. [K]	12800 ± 200	CUT R
DEVIATION [ΔuV]	0.004 ± 0.002	CUT B
LUMINACE [cd/m²]	5.0 ± 0.6	BRT

HIGH LIGHT ADJUSTMENT

11. Place the light reception food of the White balance meter on position that the food bottom edge is 2~3cm UP from V-center of High (White) parts in picture pattern. (See Fig. 3)

12. Adjust data of "R DR" and "B DR" so that White balance meter may indicate following value. If luminance is different from following value, Readjust data of "CONT".

[NTSC HIGH LIGHT]

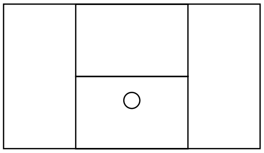
	ADJUSTMENT SPEC	DATA
	CT-34WX53	
COLOR TEMP. [K]	12400 ± 200	R DR
DEVIATION [ΔuV]	-0.002 ± 0.002	B DR
LUMINACE [cd/m²]	160.0 ± 8.0	CONT

13. Confirm the White balances of Low light.
If it is poor, Repeat item 12 to item 16.
14. If you change data of "CONT", Return former data.

HD WHITE BALANCE

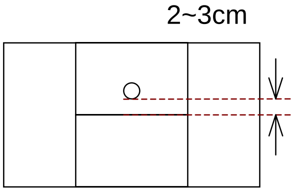
15. Set COLOR TEMP to COOL.
16. Apply HD White balance pattern.
17. Confirm that HD White balance is as same as NTSC .
18. If adjust level is no good, re-adjust white balance for HD.

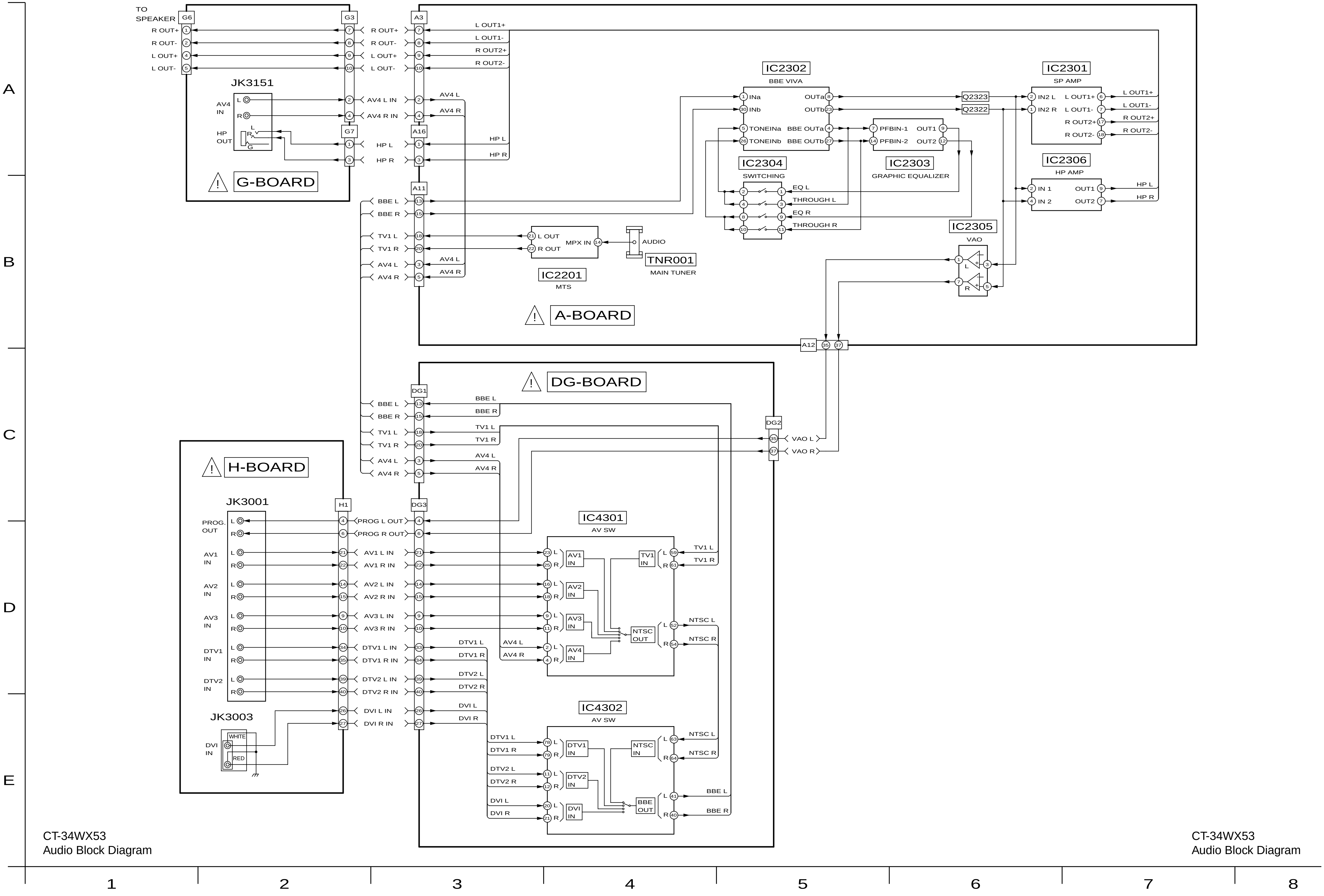
(FIG. 2)
Food position of white balance meter



*Set the food of White balance meter to position that Color SAG is nothing.

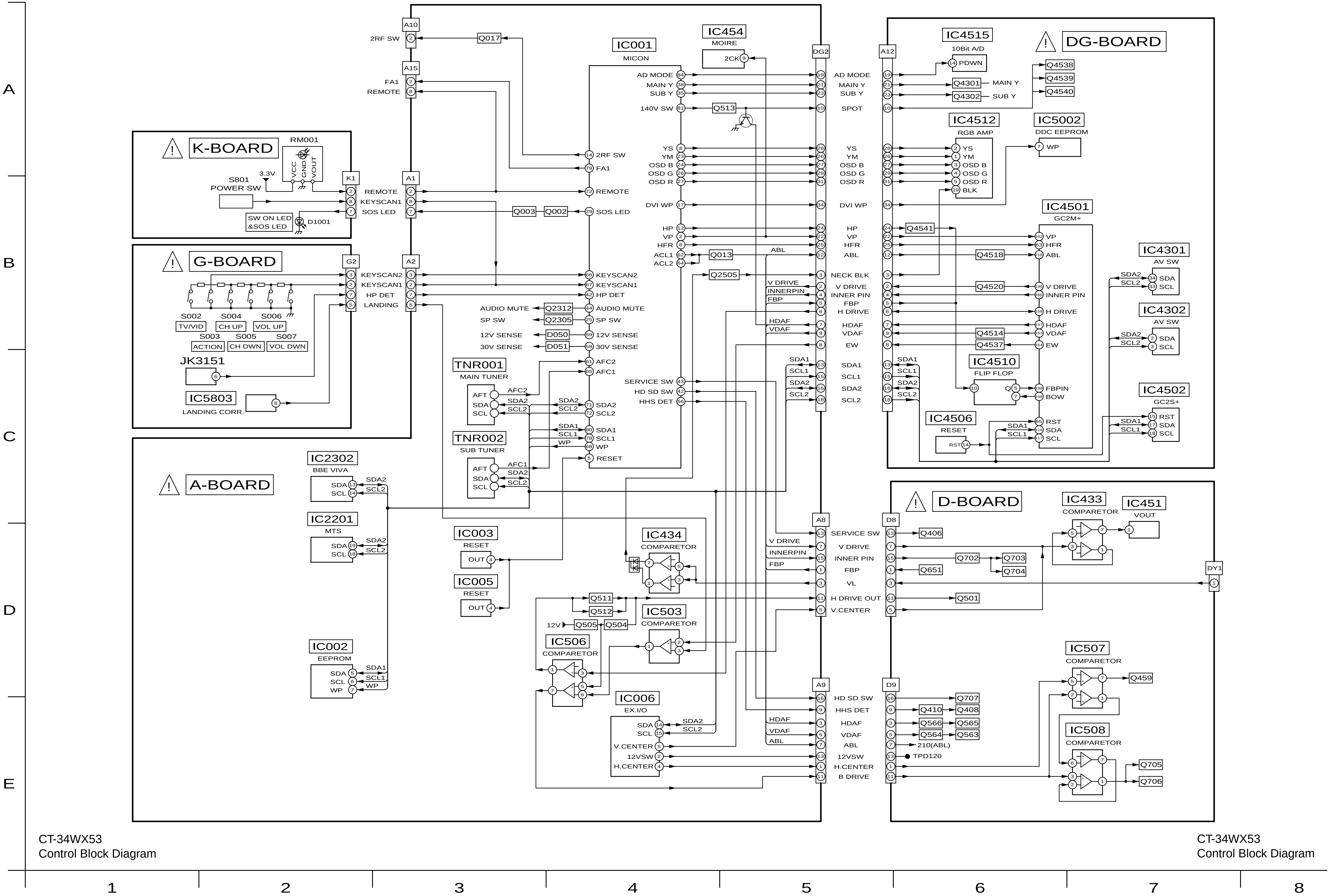
(Fig. 3)
Food position of White balance meter




TO SPEAKER
G6
R OUT+
R OUT-
L OUT+
L OUT-
G3
A3
L OUT1+
L OUT1-
R OUT2+
R OUT2-
JK3151
AV4 IN
L
R
HP OUT
G
AV4 L IN
AV4 R IN
AV4 L
AV4 R
G7
A16
HP L
HP R
G-BOARD
A11
BBE L
BBE R
TV1 L
TV1 R
AV4 L
AV4 R
IC2201
MTS
L OUT
R OUT
MPX IN
AUDIO
TNR001
MAIN TUNER
A-BOARD
IC2302
BBE VIVA
INa
INb
TONEINa
TONEINb
OUTa
OUTb
BBE OUTa
BBE OUTb
IC2304
SWITCHING
EQ L
THROUGH L
EQ R
THROUGH R
IC2303
GRAPHIC EQUALIZER
PFBIN-1
PFBIN-2
OUT1
OUT2
Q2323
Q2322
IC2301
SP AMP
IN2 L
IN2 R
L OUT1+
L OUT1-
R OUT2+
R OUT2-
IC2306
HP AMP
IN 1
IN 2
OUT1
OUT2
HP L
HP R
IC2305
VAO
A12
DG-BOARD
DG1
DG2
VAO L
VAO R
H-BOARD
JK3001
PROG. OUT
AV1 IN
AV2 IN
AV3 IN
DTV1 IN
DTV2 IN
JK3003
DVI IN
WHITE
RED
H1
DG3
PROG L OUT
PROG R OUT
AV1 L IN
AV1 R IN
AV2 L IN
AV2 R IN
AV3 L IN
AV3 R IN
DTV1 L IN
DTV1 R IN
DTV2 L IN
DTV2 R IN
DVI L IN
DVI R IN
DTV1 L
DTV1 R
DTV2 L
DTV2 R
DVI L
DVI R
IC4301
AV SW
AV1 IN
AV2 IN
AV3 IN
AV4 IN
TV1 IN
NTSC OUT
NTSC L
NTSC R
IC4302
AV SW
DTV1 IN
DTV2 IN
DVI IN
NTSC IN
BBE OUT
1
2
3
4
5
6
7
8
A
B
C
D
E

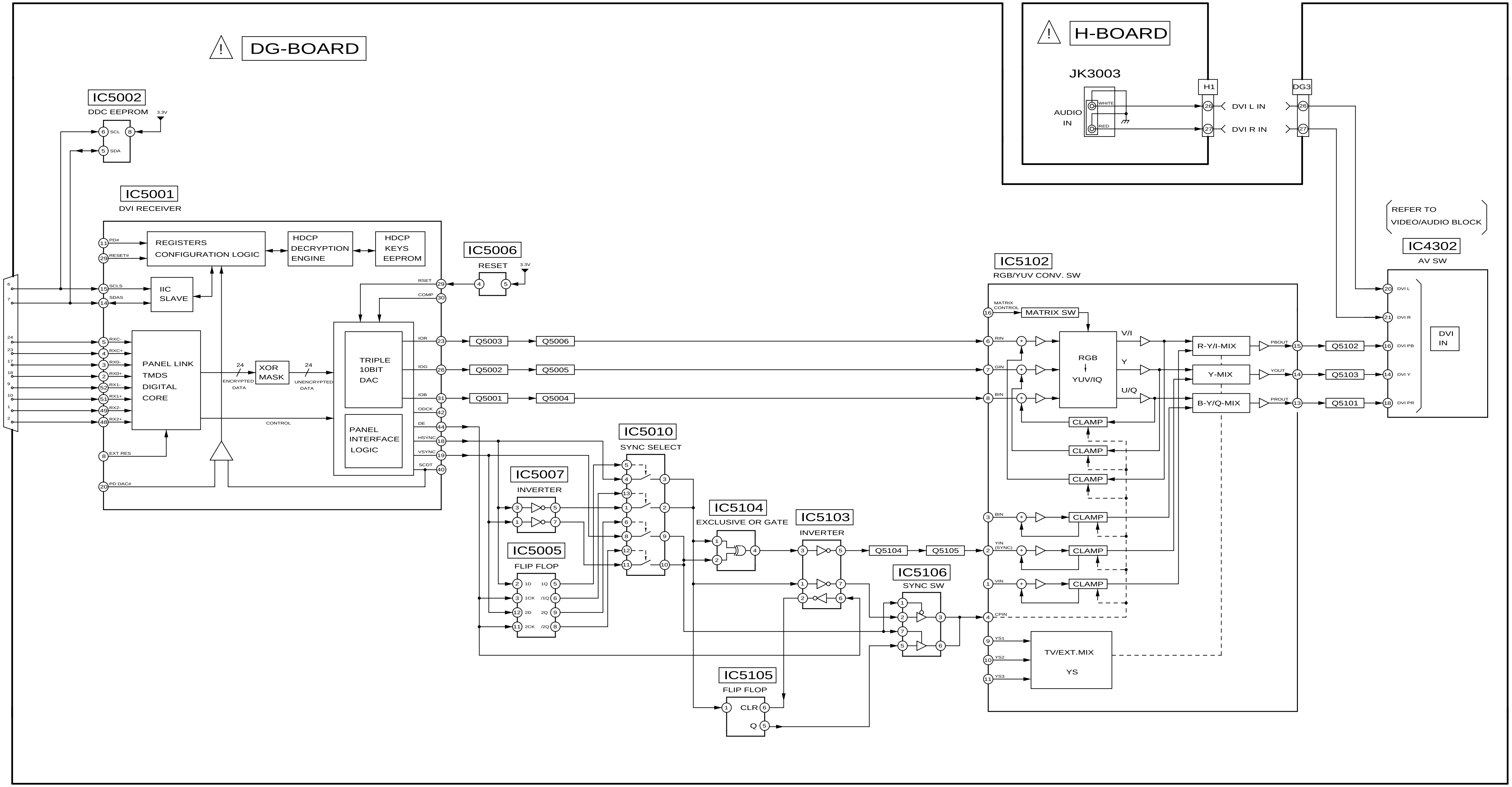
CT-34WX53
Audio Block Diagram

CT-34WX53
Audio Block Diagram


A
B
C
D
E
1
2
3
4
5
6
7
8
K-BOARD
RM001
VCC
GND
VOUT
3.3V
S801
POWER SW
SW ON LED
&SOS LED
D1001
K1
REMOTE
KEYSCAN1
SOS LED
G-BOARD
G2
KEYSCAN2
KEYSCAN1
HP DET
LANDING
S002
TV/VID
S004
CH UP
S006
VOL UP
S003
ACTION
S005
CH DWN
S007
VOL DWN
JK3151
IC5803
LANDING CORR.
A10
2RF SW
Q017
A15
FA1
REMOTE
A1
A2
IC001
MICON
AD MODE
MAIN Y
SUB Y
140V SW
Q513
2RF SW
FA1
REMOTE
Q003
Q002
SOS LED
YS
YM
OSD B
OSD G
OSD R
DVI WP
HP
VP
HFR
ACL1
ACL2
Q013
ABL
Q2505
KEYSCAN2
KEYSCAN1
HP DET
AUDIO MUTE
Q2312
SP SW
Q2305
12V SENSE
D050
30V SENSE
D051
AFC2
AFC1
SERVICE SW
HD SD SW
HHS DET
TNR001
MAIN TUNER
AFT
SDA
SCL
SDA2
SCL2
TNR002
SUB TUNER
AFC1
SDA1
SCL1
WP
RESET
IC454
MOIRE
2CK
DG2
A-BOARD
IC2302
BBE VIVA
IC2201
MTS
IC002
EEPROM
IC003
RESET
OUT
IC005
RESET
IC434
COMPARETOR
Q511
Q512
12V
Q505
Q504
IC503
COMPARETOR
IC506
COMPARETOR
IC006
EX.I/O
V.CENTER
12VSW
H.CENTER
V DRIVE
INNERPIN
FBP
HDAF
VDAF
A8
SERVICE SW
V DRIVE
INNER PIN
FBP
VL
H DRIVE OUT
V.CENTER
A9
HD SD SW
HHS DET
HDAF
VDAF
ABL
12VSW
H.CENTER
B DRIVE
A12
DG-BOARD
IC4515
10Bit A/D
PDWN
Q4538
Q4539
Q4540
Q4301
Q4302
MAIN Y
SUB Y
SPOT
NECK BLK
H DRIVE
EW
IC4512
RGB AMP
BLK
IC5002
DDC EEPROM
IC4501
GC2M+
Q4541
Q4518
Q4520
Q4514
Q4537
IC4510
FLIP FLOP
Q
FBPIN
BOW
IC4506
RST
IC4301
AV SW
IC4302
AV SW
IC4502
GC2S+
D-BOARD
D8
Q406
Q702
Q703
Q704
Q651
Q501
IC433
COMPARETOR
IC451
VOUT
DY1
D9
Q707
Q410
Q408
Q566
Q565
Q564
Q563
210(ABL)
TPD120
IC507
COMPARETOR
Q459
IC508
COMPARETOR
Q705
Q706

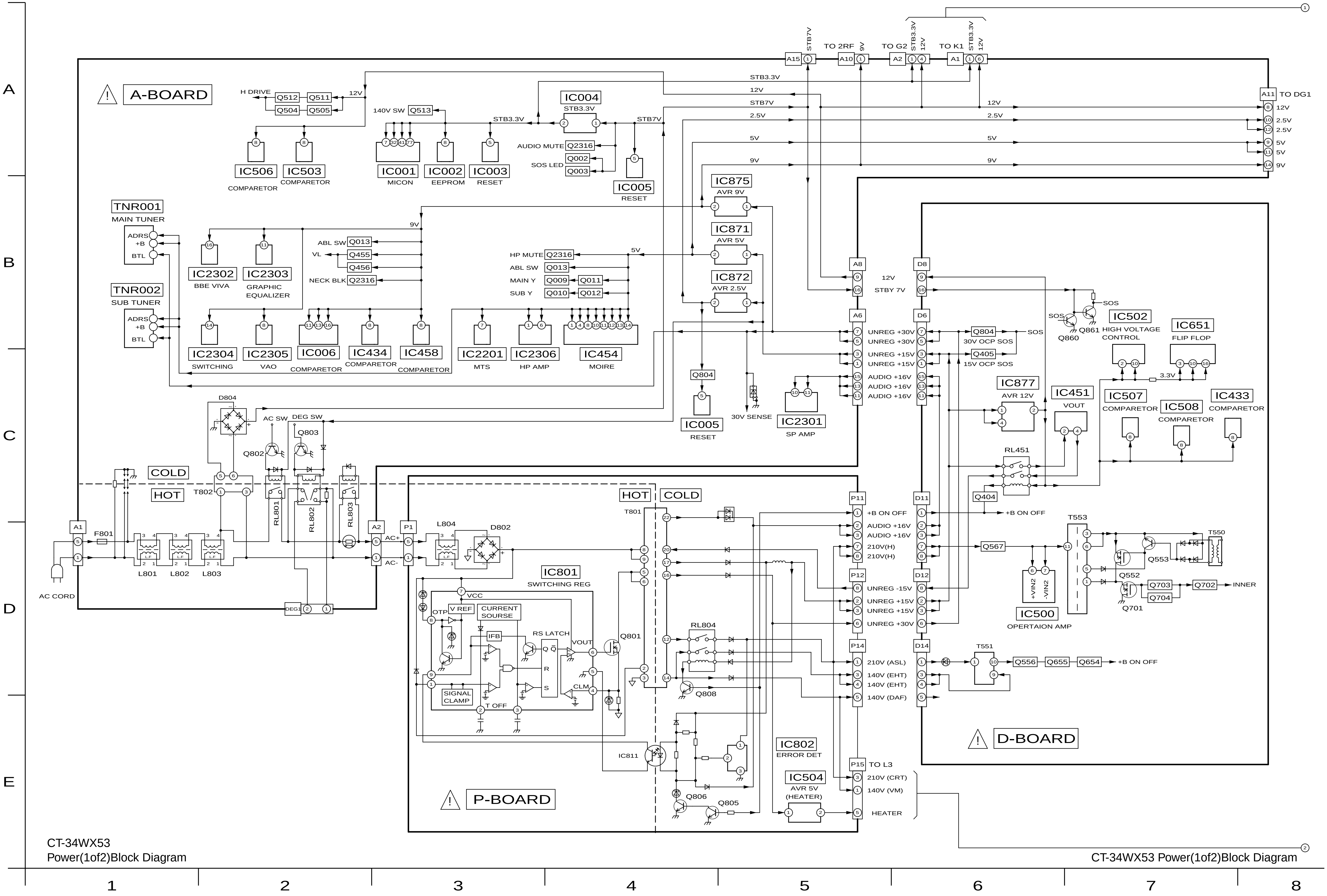
CT-34WX53
Control Block Diagram

CT-34WX53
Control Block Diagram

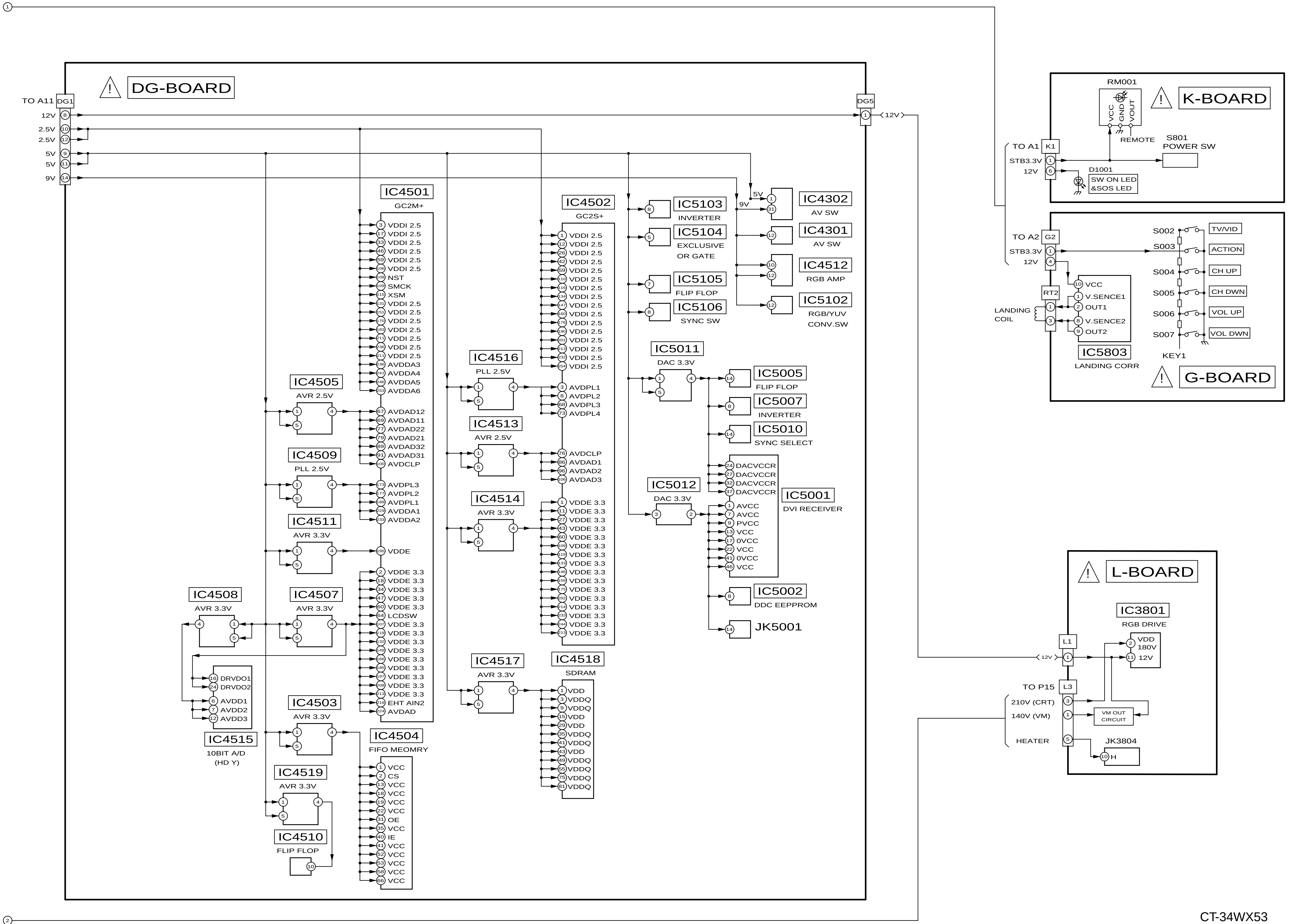

DG-BOARD
H-BOARD
JK3003
AUDIO IN
WHITE
RED
H1
DG3
DVI L IN
DVI R IN
26
27
REFER TO VIDEO/AUDIO BLOCK
IC4302
AV SW
DVI L
DVI R
DVI PB
DVI Y
DVI PR
DVI IN
IC5002
DDC EEPROM
3.3V
SCL
SDA
IC5001
DVI RECEIVER
PD#
RESET#
REGISTERS CONFIGURATION LOGIC
HDCP DECRYPTION ENGINE
HDCP KEYS EEPROM
SCLS
SDAS
IIC SLAVE
JK5001
DIGITAL IN
RXC-
RXC+
RX0-
RX0+
RX1-
RX1+
RX2-
RX2+
PANEL LINK TMDS DIGITAL CORE
24
ENCRYPTED DATA
XOR MASK
UNENCRYPTED DATA
TRIPLE 10BIT DAC
PANEL INTERFACE LOGIC
CONTROL
EXT RES
PD DAC#
RSET
COMP
IOR
IOG
IOB
ODCK
DE
HSYNC
VSYNC
SCDT
IC5006
RESET
Q5003
Q5006
Q5002
Q5005
Q5001
Q5004
IC5010
SYNC SELECT
IC5007
INVERTER
IC5005
FLIP FLOP
1D
1CK
2D
2CK
1Q
/1Q
2Q
/2Q
IC5104
EXCLUSIVE OR GATE
IC5103
INVERTER
Q5104
Q5105
IC5106
SYNC SW
IC5105
FLIP FLOP
CLR
Q
IC5102
RGB/YUV CONV. SW
MATRIX CONTROL
MATRIX SW
RIN
GIN
BIN
RGB
YUV/IQ
V/I
Y
U/Q
R-Y/I-MIX
Y-MIX
B-Y/Q-MIX
PBOUT
YOUT
PROUT
Q5102
Q5103
Q5101
CLAMP
YIN (SYNC)
VIN
CPIN
YS1
YS2
YS3
TV/EXT.MIX
YS
A
B
C
D
E
1
2
3
4
5
6
7
8

CT-34WX53
DVI Block Diagram

CT-34WX53
DVI Block Diagram

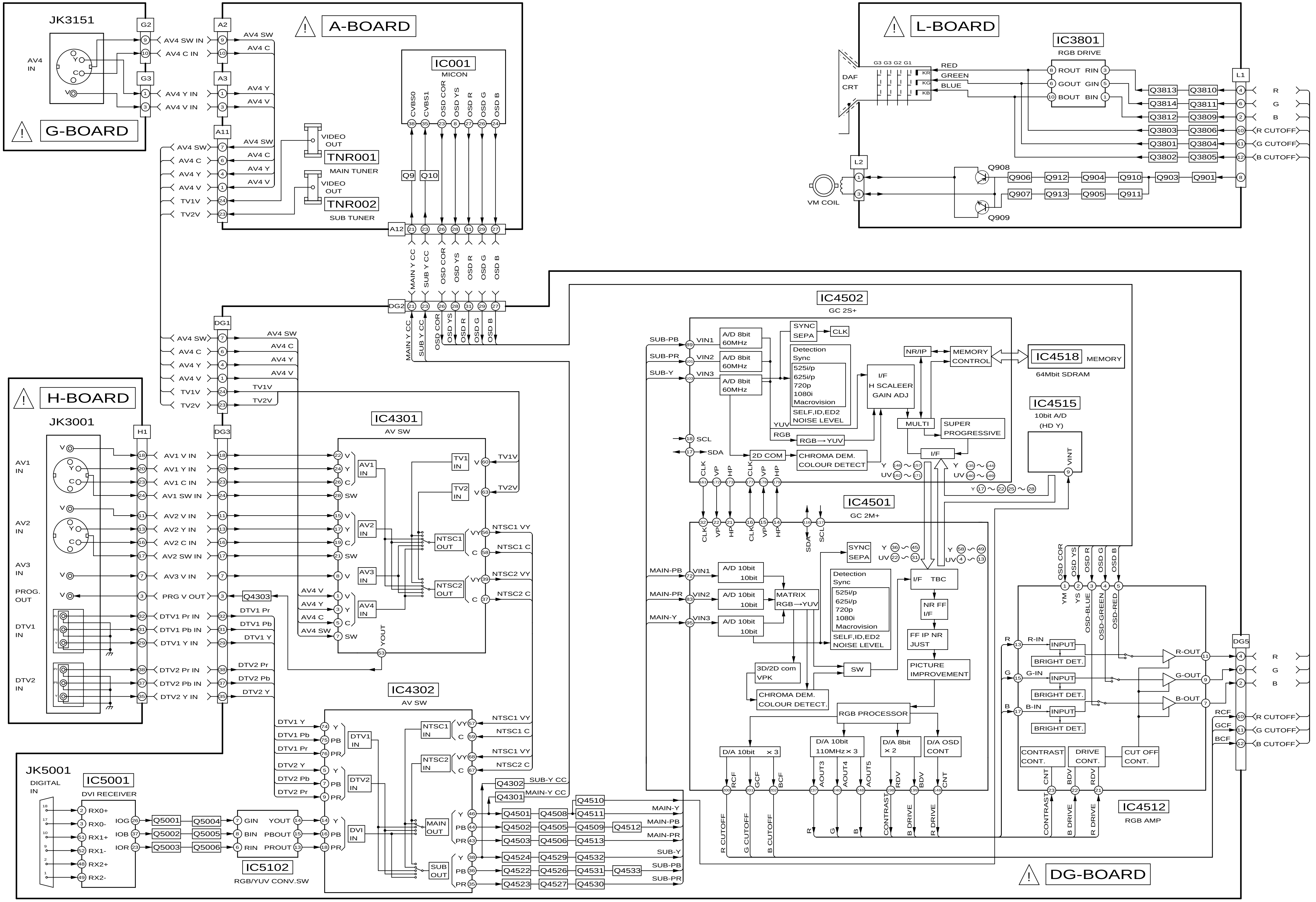

A
B
C
D
E
1
2
3
4
5
6
7
8
A-BOARD
P-BOARD
D-BOARD
H DRIVE
Q512
Q511
Q504
Q505
12V
140V SW
Q513
STB3.3V
IC004
STB3.3V
STB7V
AUDIO MUTE
Q2316
Q002
SOS LED
Q003
IC506
COMPARETOR
IC503
COMPARETOR
IC001
MICON
IC002
EEPROM
IC003
RESET
IC005
RESET
A15
STB7V
TO 2RF
A10
9V
TO G2
A2
STB3.3V
12V
TO K1
A1
STB3.3V
12V
A11
TO DG1
12V
2.5V
2.5V
5V
5V
9V
STB7V
2.5V
5V
9V
TNR001
MAIN TUNER
ADRS
+B
BTL
TNR002
SUB TUNER
ADRS
+B
BTL
9V
IC2302
BBE VIVA
IC2303
GRAPHIC EQUALIZER
ABL SW
Q013
VL
Q455
Q456
NECK BLK
Q2316
IC875
AVR 9V
IC871
AVR 5V
IC872
AVR 2.5V
HP MUTE
Q2316
5V
ABL SW
Q013
MAIN Y
Q009
Q011
SUB Y
Q010
Q012
IC2304
SWITCHING
IC2305
VAO
IC006
COMPARETOR
IC434
COMPARETOR
IC458
COMPARETOR
IC2201
MTS
IC2306
HP AMP
IC454
MOIRE
Q804
IC005
RESET
30V SENSE
IC2301
SP AMP
A8
12V
STBY 7V
D8
A6
D6
UNREG +30V
UNREG +30V
UNREG +15V
UNREG +15V
AUDIO +16V
AUDIO +16V
AUDIO +16V
Q804
30V OCP SOS
SOS
Q405
15V OCP SOS
SOS
Q860
Q861
SOS
IC502
HIGH VOLTAGE CONTROL
IC651
FLIP FLOP
3.3V
IC877
AVR 12V
IC451
VOUT
IC507
COMPARETOR
IC508
COMPARETOR
IC433
COMPARETOR
RL451
Q404
D804
AC SW
DEG SW
Q803
Q802
COLD
HOT
T802
RL801
RL802
RL803
A1
F801
AC CORD
L801
L802
L803
LF
DEG1
A2
P1
AC+
AC-
L804
D802
IC801
SWITCHING REG
VCC
OTP
V REF
CURRENT SOURSE
IFB
RS LATCH
Q
R
S
VOUT
CLM
SIGNAL CLAMP
T OFF
Q801
HOT
COLD
T801
RL804
Q808
IC811
IC802
ERROR DET
Q806
Q805
IC504
AVR 5V (HEATER)
P11
+B ON OFF
AUDIO +16V
AUDIO +16V
210V(H)
210V(H)
D11
+B ON OFF
Q567
T553
T550
Q553
Q552
Q701
Q703
Q704
Q702
INNER
IC500
OPERTAION AMP
+VIN2
-VIN2
P12
UNREG -15V
UNREG +15V
UNREG +15V
UNREG +30V
D12
P14
210V (ASL)
140V (EHT)
140V (EHT)
140V (DAF)
D14
T551
Q556
Q655
Q654
+B ON OFF
P15
TO L3
210V (CRT)
140V (VM)
HEATER
①
②

CT-34WX53
Power(1of2)Block Diagram


①
DG-BOARD
TO A11
DG1
12V ⑧
2.5V ⑩
2.5V ⑫
5V ⑨
5V ⑪
9V ⑭
DG5
① 12V
IC4501
GC2M+
VDDI 2.5
NST
SMCK
XSM
AVDDA3
AVDDA4
AVDDA5
AVDDA6
AVDAD12
AVDAD11
AVDAD22
AVDAD21
AVDAD32
AVDAD31
AVDCLP
AVDPL3
AVDPL2
AVDPL1
AVDDA1
AVDDA2
VDDE
VDDE 3.3
LCDSW
EHT AIN2
AVDAD
IC4502
GC2S+
VDDI 2.5
AVDPL1
AVDPL2
AVDPL3
AVDPL4
AVDCLP
AVDAD1
AVDAD2
AVDAD3
VDDE 3.3
IC4505
AVR 2.5V
IC4509
PLL 2.5V
IC4511
AVR 3.3V
IC4508
AVR 3.3V
IC4507
AVR 3.3V
IC4515
10BIT A/D
(HD Y)
DRVDO1
DRVDO2
AVDD1
AVDD2
AVDD3
IC4503
AVR 3.3V
IC4519
AVR 3.3V
IC4510
FLIP FLOP
IC4504
FIFO MEOMRY
VCC
CS
OE
IE
IC4516
PLL 2.5V
IC4513
AVR 2.5V
IC4514
AVR 3.3V
IC4517
AVR 3.3V
IC4518
SDRAM
VDD
VDDQ
IC5103
INVERTER
IC5104
EXCLUSIVE
OR GATE
IC5105
FLIP FLOP
IC5106
SYNC SW
5V
9V
IC4302
AV SW
IC4301
AV SW
IC4512
RGB AMP
IC5102
RGB/YUV
CONV.SW
IC5011
DAC 3.3V
IC5005
FLIP FLOP
IC5007
INVERTER
IC5010
SYNC SELECT
DACVCCR
IC5012
DAC 3.3V
IC5001
DVI RECEIVER
AVCC
PVCC
VCC
0VCC
IC5002
DDC EEPPROM
JK5001
K-BOARD
RM001
VCC
GND
VOUT
REMOTE
S801
POWER SW
TO A1
K1
STB3.3V ①
12V ⑥
D1001
SW ON LED
&SOS LED
G-BOARD
TO A2
G2
STB3.3V ①
12V ④
RT2
LANDING
COIL
VCC
V.SENCE1
OUT1
V.SENCE2
OUT2
IC5803
LANDING CORR
S002
TV/VID
S003
ACTION
S004
CH UP
S005
CH DWN
S006
VOL UP
S007
VOL DWN
KEY1
L-BOARD
L1
12V
IC3801
RGB DRIVE
VDD
180V
12V
TO P15
L3
210V (CRT)
140V (VM)
HEATER
VM OUT
CIRCUIT
JK3804
H
②
8
9
10
11
12
13
14
15

CT-34WX53 Power(2of2)Block Diagram

CT-34WX53
Power(1of2)Block Diagram

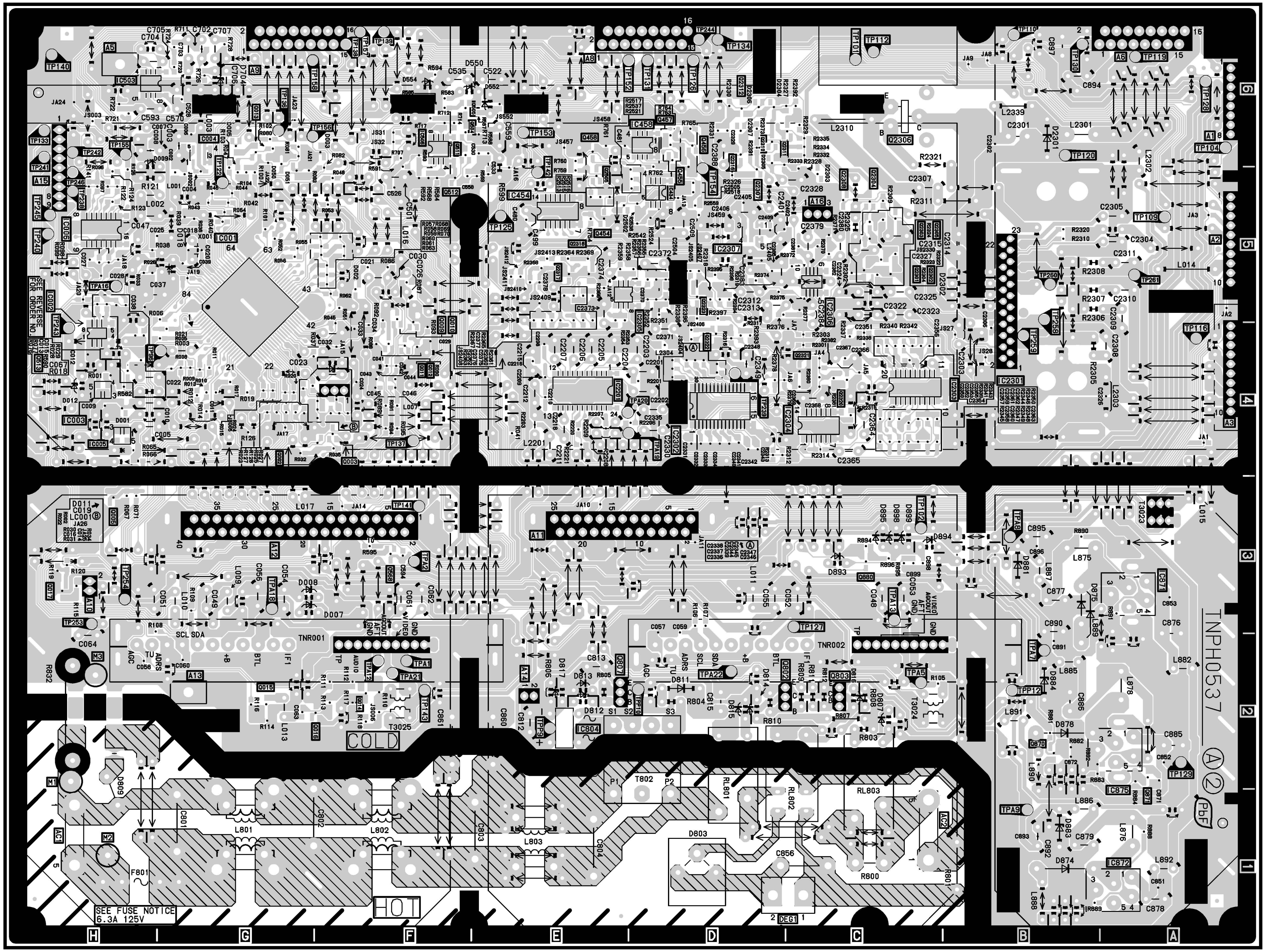


JK3151
AV4 IN
G-BOARD
G2
G3
AV4 SW IN
AV4 C IN
AV4 Y IN
AV4 V IN
A-BOARD
A2
A3
A11
A12
AV4 SW
AV4 C
AV4 Y
AV4 V
TV1V
TV2V
VIDEO OUT
TNR001
MAIN TUNER
TNR002
SUB TUNER
IC001
MICON
CVBS0
CVBS1
OSD COR
OSD YS
OSD R
OSD G
OSD B
Q9
Q10
MAIN Y CC
SUB Y CC
DG2
DG1
DG3
L-BOARD
IC3801
RGB DRIVE
DAF
CRT
G3 G2 G2 G1
KR
KG
KB
RED
GREEN
BLUE
ROUT
GOUT
BOUT
RIN
GIN
BIN
L1
Q3813
Q3810
Q3814
Q3811
Q3812
Q3809
Q3803
Q3806
Q3801
Q3804
Q3802
Q3805
R
G
B
R CUTOFF
G CUTOFF
B CUTOFF
L2
VM COIL
Q908
Q909
Q906
Q912
Q904
Q910
Q903
Q901
Q907
Q913
Q905
Q911
H-BOARD
JK3001
H1
AV1 IN
AV2 IN
AV3 IN
PROG. OUT
DTV1 IN
DTV2 IN
AV1 V IN
AV1 Y IN
AV1 C IN
AV1 SW IN
AV2 V IN
AV2 Y IN
AV2 C IN
AV2 SW IN
AV3 V IN
PRG V OUT
DTV1 Pr IN
DTV1 Pb IN
DTV1 Y IN
DTV2 Pr IN
DTV2 Pb IN
DTV2 Y IN
Q4303
IC4301
AV SW
AV1 IN
AV2 IN
AV3 IN
AV4 IN
TV1 IN
TV2 IN
NTSC1 OUT
NTSC2 OUT
NTSC1 VY
NTSC1 C
NTSC2 VY
NTSC2 C
YOUT
IC4302
AV SW
DTV1 IN
DTV2 IN
DVI IN
NTSC1 IN
NTSC2 IN
MAIN OUT
SUB OUT
DTV1 Y
DTV1 Pb
DTV1 Pr
DTV2 Y
DTV2 Pb
DTV2 Pr
Q4302
Q4301
SUB-Y CC
MAIN-Y CC
Q4510
Q4501
Q4508
Q4511
Q4502
Q4505
Q4509
Q4512
Q4503
Q4506
Q4513
Q4524
Q4529
Q4532
Q4522
Q4526
Q4531
Q4533
Q4523
Q4527
Q4530
MAIN-Y
MAIN-PB
MAIN-PR
SUB-Y
SUB-PB
SUB-PR
JK5001
DIGITAL IN
IC5001
DVI RECEIVER
RX0+
RX0-
RX1+
RX1-
RX2+
RX2-
IOG
IOB
IOR
Q5001
Q5004
Q5002
Q5005
Q5003
Q5006
IC5102
RGB/YUV CONV.SW
GIN
BIN
RIN
YOUT
PBOUT
PROUT
IC4502
GC 2S+
SUB-PB
SUB-PR
SUB-Y
VIN1
VIN2
VIN3
A/D 8bit 60MHz
SYNC SEPA
CLK
Detection Sync
525i/p
625i/p
720p
1080i
Macrovision
SELF,ID,ED2 NOISE LEVEL
I/F H SCALEER GAIN ADJ
NR/IP
MEMORY CONTROL
IC4518
MEMORY
64Mbit SDRAM
MULTI
SUPER PROGRESSIVE
YUV
RGB
RGB→YUV
SCL
SDA
2D COM
CHROMA DEM. COLOUR DETECT
I/F
IC4515
10bit A/D (HD Y)
VINT
IC4501
GC 2M+
CLK
VP
HP
MAIN-PB
MAIN-PR
MAIN-Y
A/D 10bit 10bit
MATRIX RGB→YUV
SYNC SEPA
I/F TBC
NR FF I/F
FF IP NR JUST
PICTURE IMPROVEMENT
SW
3D/2D com VPK
CHROMA DEM. COLOUR DETECT.
RGB PROCESSOR
D/A 10bit ×3
D/A 10bit 110MHz×3
D/A 8bit ×2
D/A OSD CONT
RCF
GCF
BCF
AOUT3
AOUT4
AOUT5
RDV
BDV
CNT
R CUTOFF
G CUTOFF
B CUTOFF
CONTRAST
B DRIVE
R DRIVE
IC4512
RGB AMP
YM
YS
OSD-BLUE
OSD-GREEN
OSD-RED
R-IN
G-IN
B-IN
INPUT
BRIGHT DET.
R-OUT
G-OUT
B-OUT
CONTRAST CONT.
DRIVE CONT.
CUT OFF CONT.
DG5
DG-BOARD

CT-34WX53 Video Block Diagram

CT-34WX53 Video Block Diagram

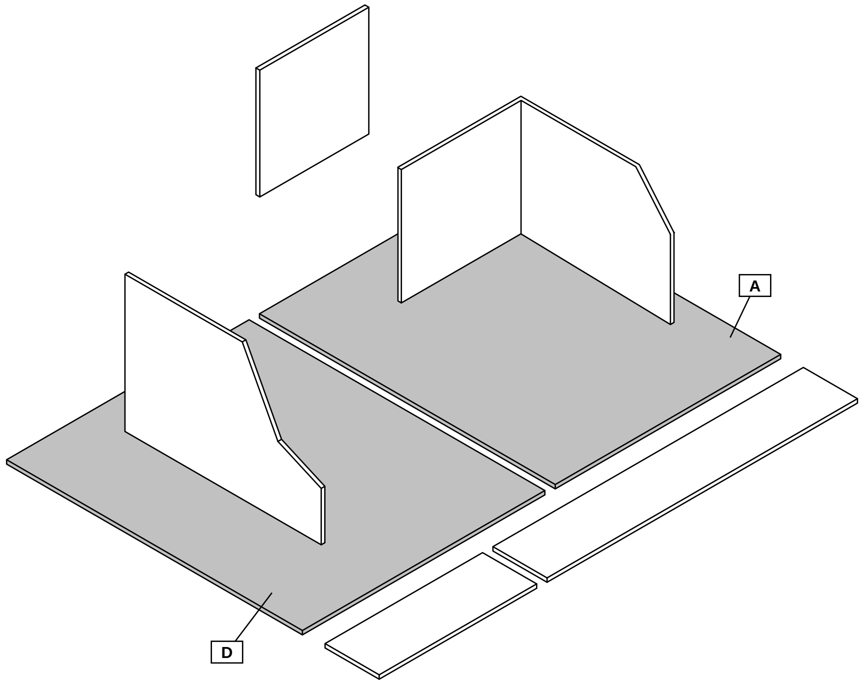
A-BOARD
TNPH0537



SEE REVERSE FOR ORDER NO.
COLD
HOT
SEE FUSE NOTICE
6.3A 125V
TNR001
TNR002
TNPH0537
A②
PbF
F801
T802
RL801
RL802
RL803
DEG1
H
G
F
E
D
C
B
A

6
5
4
3
2
1
A
B
C
D
E
F
G
H
I

CT-34WX53
A-BOARD TNPH0537



Parts Location

A-BOARD

IC

IC001	B-4
IC002	A-4
IC003	A-4
IC004	B-5
IC005	A-4
IC006	A-5
IC2201	D-4
IC2301	F-4
IC2302	E-4
IC2303	F-4
IC2304	E-4
IC2305	D-4
IC2306	E-4
IC2307	E-5
IC434	D-5
IC454	D-5
IC458	D-5
IC503	B-6
IC506	C-5
IC804	D-2
IC871	G-3
IC872	G-1
IC875	G-2

TRANSISTOR

Q002	B-4
Q003	C-4
Q005	A-3
Q009	C-4
Q010	C-4
Q011	C-4
Q012	C-4
Q013	B-5
Q014	C-2
Q015	B-2
Q016	B-2
Q017	A-3
Q2301	F-4
Q2302	F-4
Q2303	F-5
Q2304	E-5
Q2305	F-5
Q2306	E-5
Q2307	E-5
Q2308	E-5
Q2310	E-5
Q2311	E-5
Q2312	E-6
Q2316	E-5
Q2317	D-5
Q2318	D-5
Q2320	E-4
Q2321	E-4
Q2322	D-4
Q2323	D-4
Q2505	D-5
Q454	D-5
Q455	D-5
Q456	D-5
Q457	D-5
Q458	D-5
Q504	C-5
Q505	C-5
Q511	C-5
Q512	C-5
Q513	A-4
Q568	C-3
Q802	E-2
Q803	E-2
Q807	D-2
Q870	F-2
Q871	G-2
Q880	E-3

TP

TP101	E-6
TP102	F-3
TP104	G-5
TP109	G-5
TP110	F-6
TP112	E-6
TP116	G-4
TP119	G-6
TP120	F-5
TP122	B-5
TP125	C-5
TP126	D-6
TP127	E-3
TP128	G-6
TP129	G-2
TP130	F-6
TP131	D-6
TP133	A-5
TP134	E-6
TP136	B-5
TP137	C-4
TP137	C-6
TP138	C-6
TP139	C-6
TP140	A-6
TP141	C-3
TP142	D-5
TP143	C-2
TP152	D-6
TP153	D-5
TP154	D-5
TP155	A-5
TP156	B-5
TP158	B-6
TP238	A-5
TP238	E-4
TP240	A-5
TP241	A-5
TP242	A-5
TP243	A-4
TP244	D-6
TP245	A-5
TP246	A-5
TP253	A-3
TP254	A-3
TP258	F-4
TP259	F-4
TP260	F-4
TP261	G-4
TP96	B-4
TPA1	C-2
TPA12	C-2
TPA13	E-3
TPA16	A-4
TPA18	B-3
TPA19	D-4
TPA2	C-3
TPA20	D-4
TPA21	C-2
TPA22	E-2
TPA5	F-2
TPA7	F-2
TPA8	F-3
TPA9	F-2
TPP10	D-2
TPP12	F-2
TPP9	D-2

Parts Location

D-BOARD

IC

IC433	A-4
IC451	E-5
IC500	C-2
IC502	D-2
IC507	B-3
IC508	A-2
IC651	C-5
IC877	A-2

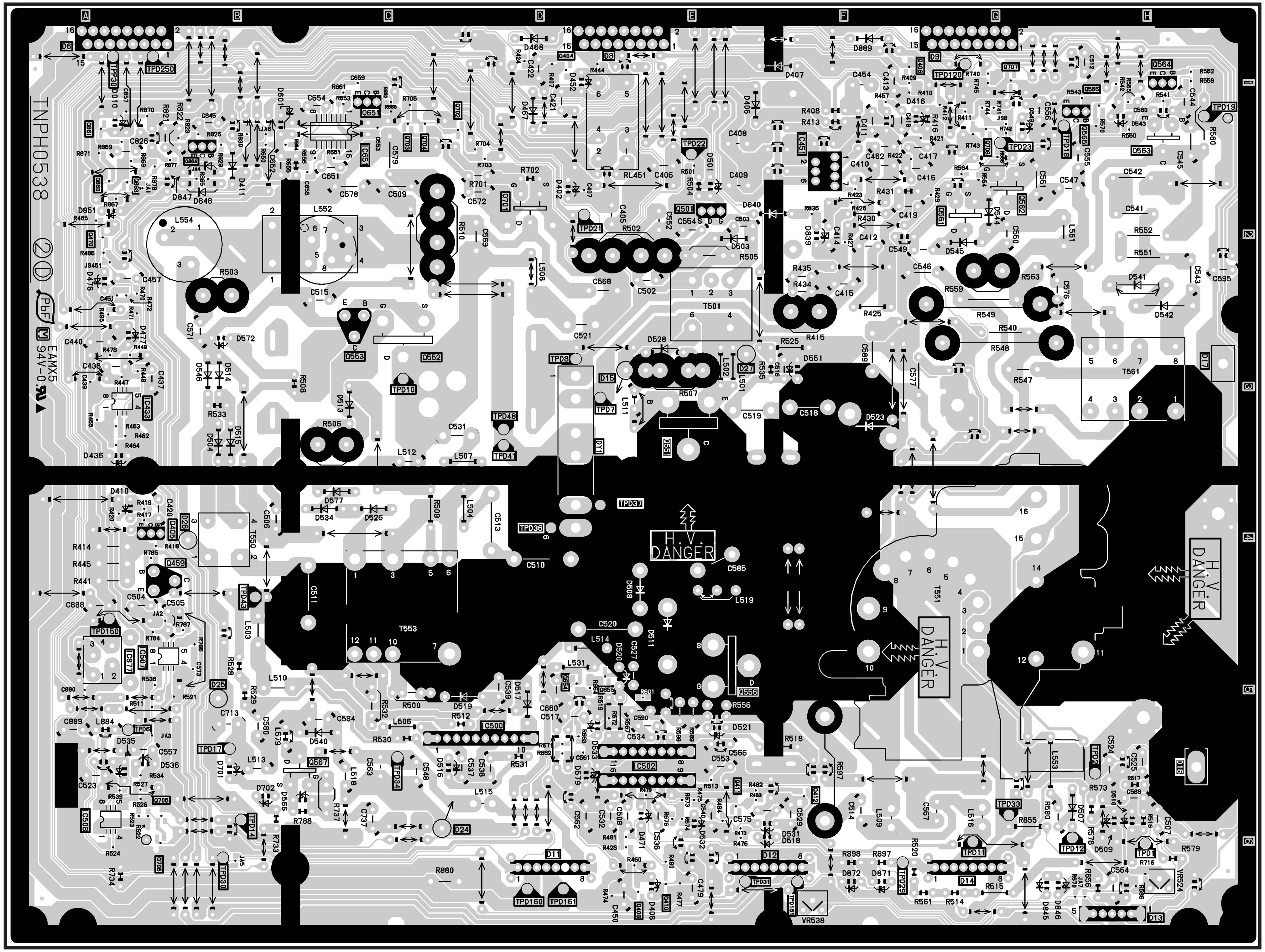
TRANSISTOR

Q404	D-6
Q405	B-3
Q406	F-6
Q408	D-1
Q410	D-1
Q411	E-2
Q412	E-2
Q459	B-3
Q470	A-5
Q501	D-5
Q551	D-4
Q552	C-4
Q553	C-4
Q556	E-2
Q561	F-5
Q562	F-5
Q563	G-5
Q564	G-6
Q565	G-5
Q566	G-5
Q567	B-2
Q651	C-5
Q654	D-2
Q655	D-2
Q701	C-5
Q702	C-5
Q703	C-5
Q704	C-5
Q705	B-2
Q706	B-1
Q707	F-6
Q708	F-5
Q860	A-5
Q861	A-5
Q863	A-5

TP

TPD6	A-2
TPD1	G-2
TPD10	C-4
TPD11	F-2
TPD12	F-2
TPD120	F-6
TPD14	B-2
TPD150	A-3
TPD151	E-1
TPD160	D-1
TPD161	D-1
TPD17	B-2
TPD18	F-5
TPD19	G-5
TPD2	G-2
TPD21	D-5
TPD22	D-5
TPD23	F-5
TPD250	B-6
TPD29	F-1
TPD30	B-1
TPD31	E-1
TPD33	F-2
TPD34	C-2
TPD36	D-3
TPD37	D-3
TPD41	C-4
TPD43	B-3
TPD48	C-4
TPD7	D-4
TPD8	D-4
TPP30	A-6

D-BOARD
TXN/D10HAR

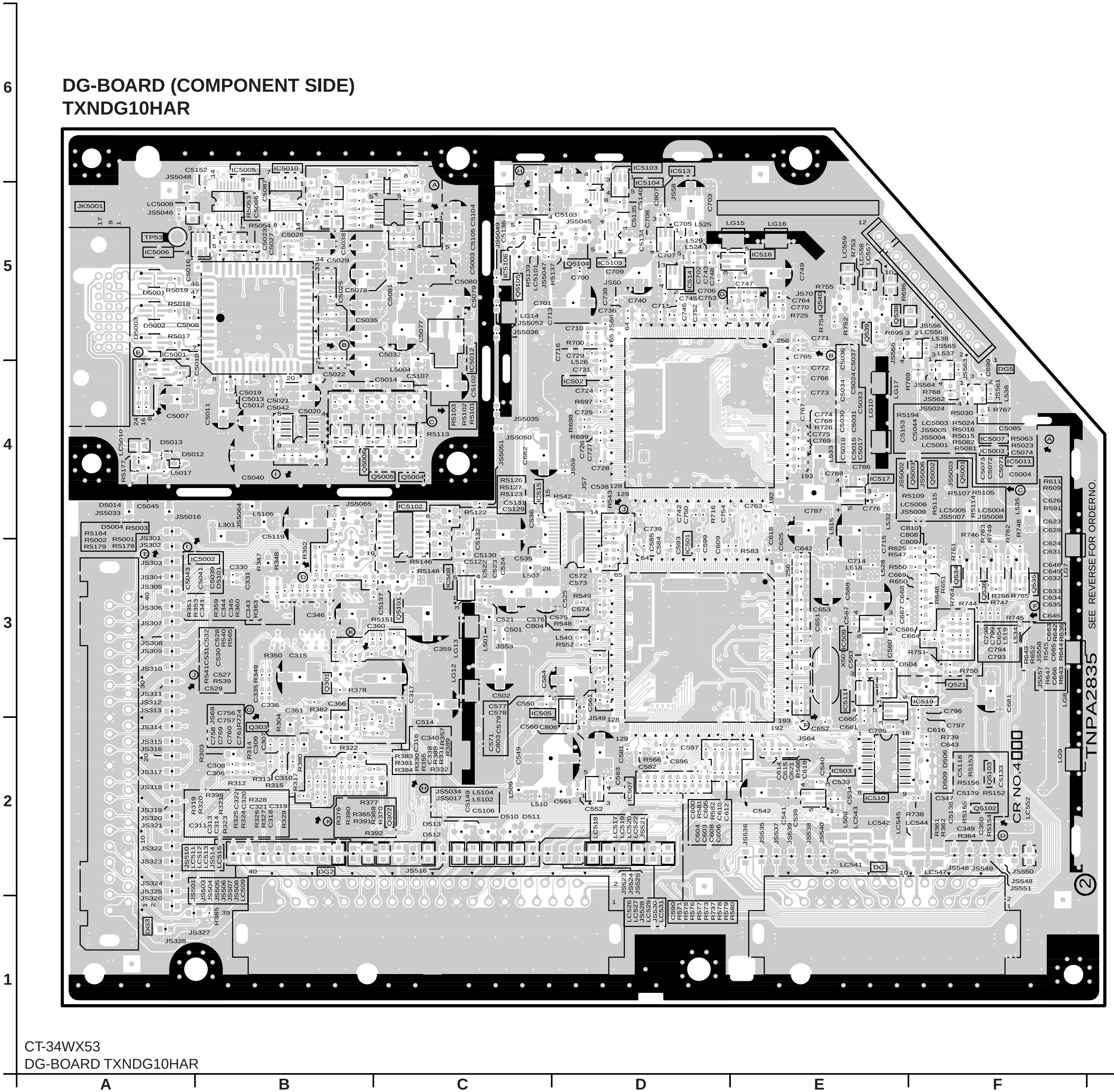


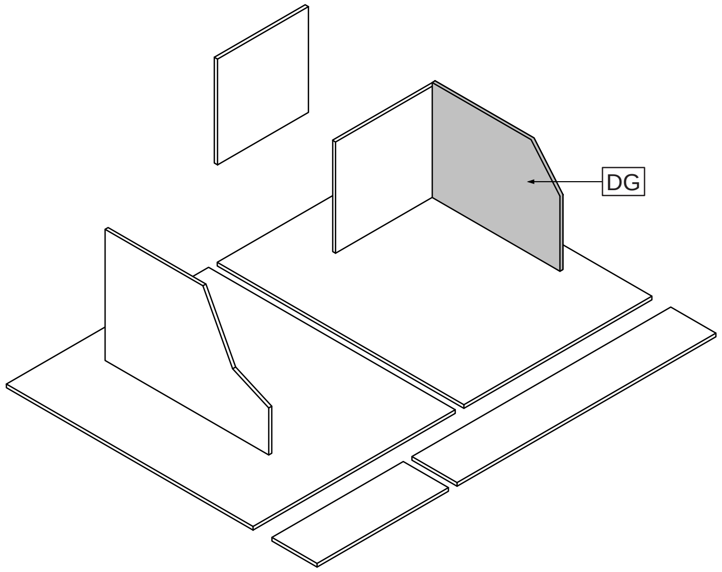
TNPH0538
H.V. DANGER
H.V. DANGER
H.V. DANGER
T501
T551
T553
T561
L552
L554
Q552
Q553
Q556
IC500
IC502
VR524
VR538
D11
D12
D13
D14
TPD37
TPD43
TPD150
A
B
C
D
E
F
G
H

6
5
4
3
2
1

A B C D E F G H I

DG-BOARD (COMPONENT SIDE)
TXNDG10HAR





Parts Location

DG-BOARD			
IC		**TRANSISTOR**	
IC4501	D-3	Q4301	B-3
IC4502	D-4	Q4302	C-3
IC4503	E-2	Q4303	E-5
IC4505	D-2	Q4521	F-3
IC4507	D-2	Q4534	F-3
IC4508	C-3	Q4535	F-3
IC4509	E-3	Q4536	F-3
IC4510	E-2	Q4538	E-5
IC4511	E-3	Q4539	E-5
IC4513	D-5	Q4540	E-5
IC4514	D-5	Q5001	C-4
IC4515	D-4	Q5002	C-4
IC4516	E-5	Q5003	B-4
IC4517	E-4	Q5004	C-4
IC4519	E-3	Q5005	C-4
IC5001	B-5	Q5006	B-4
IC5002	B-4	Q5101	B-3
IC5003	C-5	Q5102	B-4
IC5005	B-5	Q5103	F-2
IC5006	B-5	Q5104	D-5
IC5007	C-5	Q5105	C-5
IC5010	B-5	**TP**	
IC5011	C-5	TP53	A-5
IC5012	C-4		
IC5102	C-4		
IC5103	D-6		
IC5104	D-5		
IC5105	D-5		
IC5106	C-5		

6

5

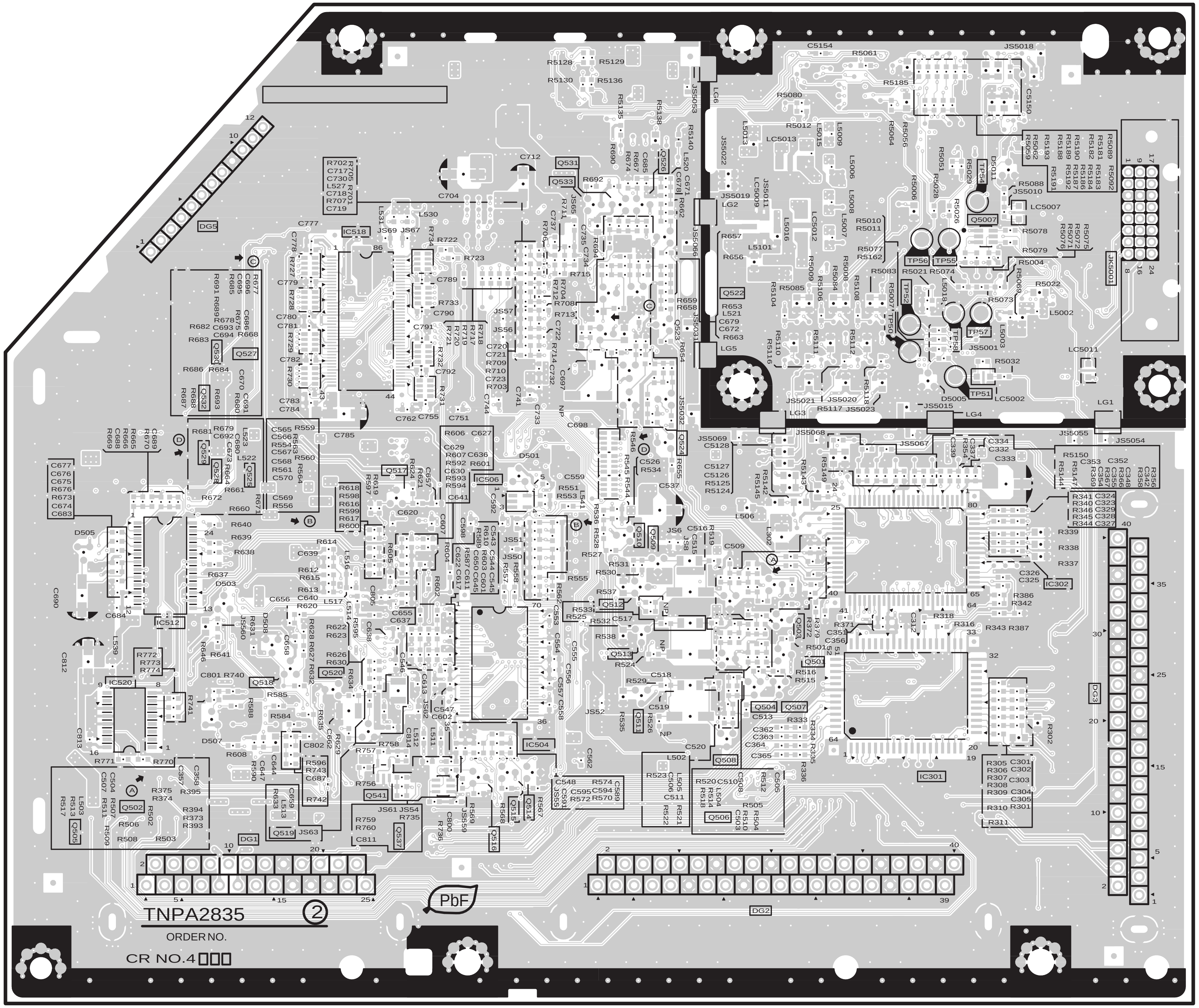
4

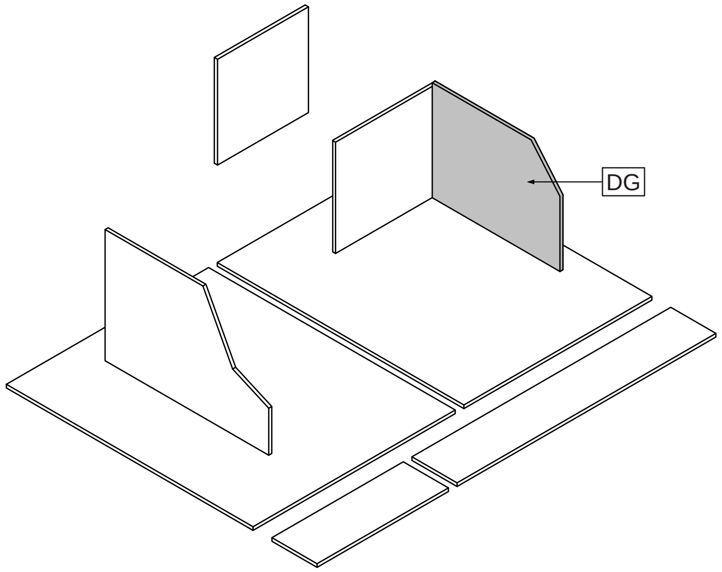
3

2

1

DG-BOARD (FOIL SIDE)
TXNDG10HAR


TNPA2835
②
ORDER NO.
CR NO.4
PbF
DG1
DG2
DG3
DG5
IC301
IC302
IC504
IC506
IC512
IC518
IC520



Parts Location

DG-BOARD

IC	
IC4301	E-2
IC4302	E-3
IC4504	C-2
IC4506	C-3
IC4512	B-3
IC4518	B-5
IC4520	A-2

TRANSISTOR	
Q4501	E-3
Q4502	D-3
Q4503	E-3
Q4504	E-2
Q4505	D-3
Q4506	D-2
Q4507	E-2
Q4508	D-2
Q4509	D-3
Q4510	D-3
Q4511	D-2
Q4512	D-3
Q4513	D-3
Q4514	C-2
Q4515	C-2
Q4516	C-2
Q4517	C-3
Q4518	B-2
Q4519	B-2
Q4520	B-2
Q4522	D-4
Q4523	D-4
Q4524	D-4
Q4525	D-4
Q4526	D-5
Q4527	D-4
Q4528	D-4
Q4529	D-4
Q4530	D-4
Q4531	D-5
Q4532	D-4
Q4533	D-5
Q4537	C-2
Q4541	C-2
Q5007	F-5

TP	
TP50	E-4
TP51	E-4
TP52	E-4
TP54	F-5
TP55	E-5
TP56	E-5
TP57	F-4
TP58	E-4

A B C D E F G H I